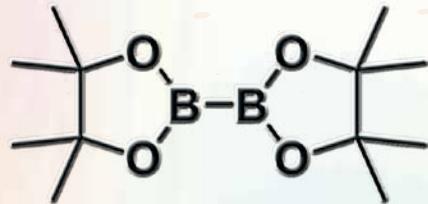
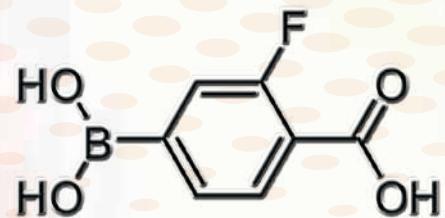
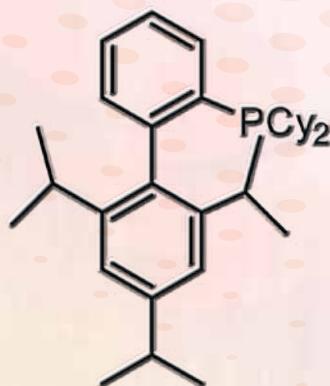


Reagent for Coupling Reaction



Kanto Reagents



Boronic Acid

Boronic Acid Esters

Organic Trifluoro Pottassium Borate

Buchwald Ligand

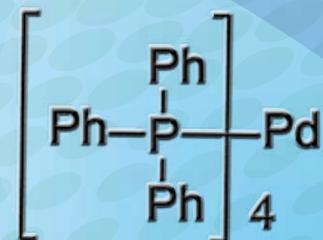
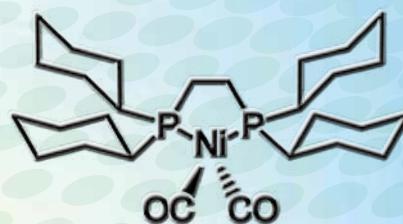
Amphos

Phosphonium Borate Derivatives

Ni-dcype

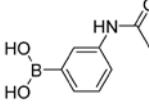
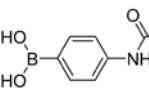
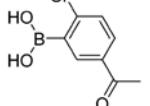
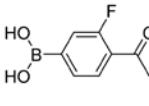
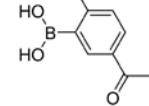
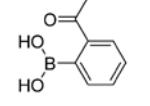
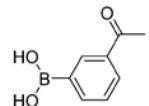
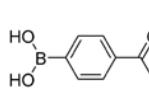
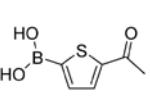
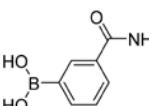
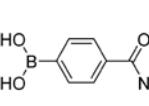
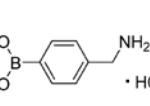
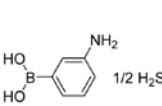
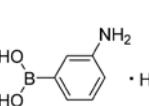
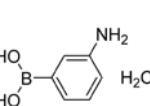
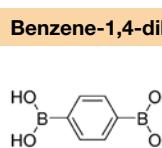
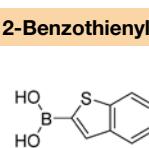
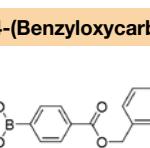
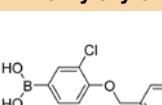
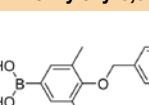
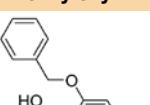
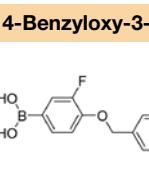
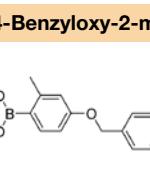
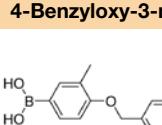
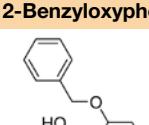
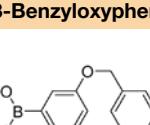
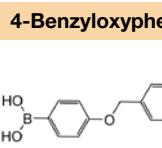
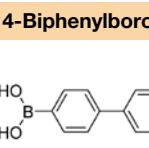
K₂CO₃, Na₂CO₃

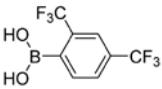
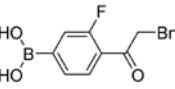
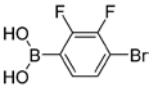
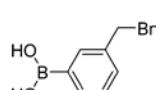
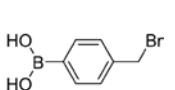
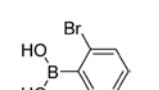
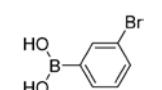
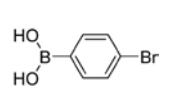
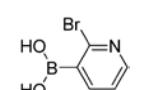
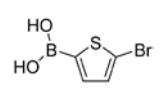
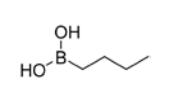
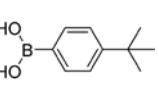
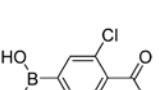
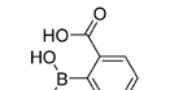
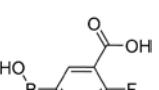
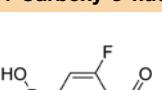
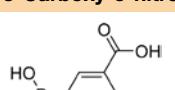
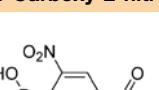
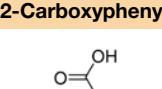
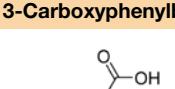
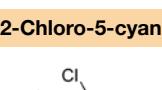
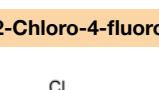
Metal Scavenger [R-Cat-Sil]



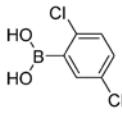
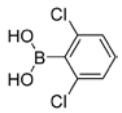
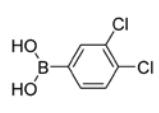
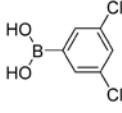
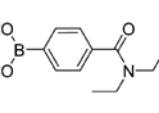
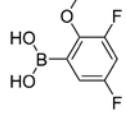
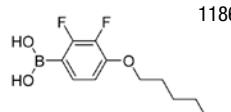
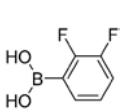
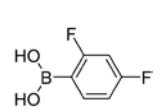
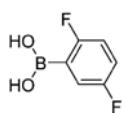
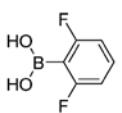
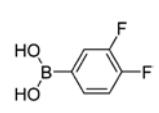
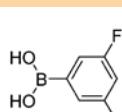
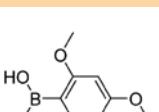
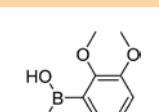
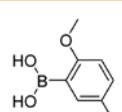
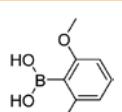
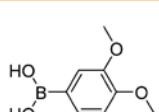
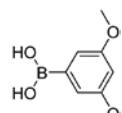
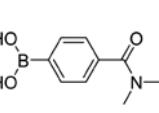
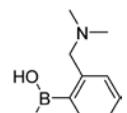
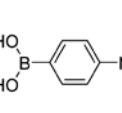
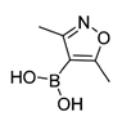
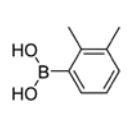
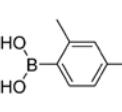
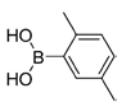
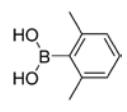
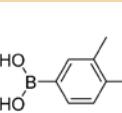
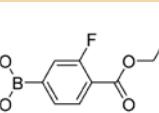
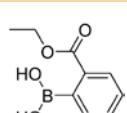
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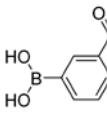
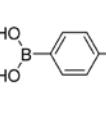
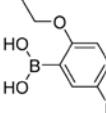
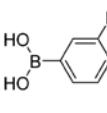
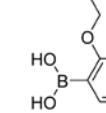
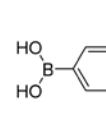
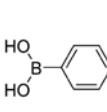
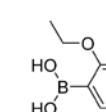
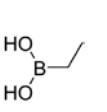
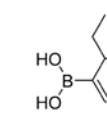
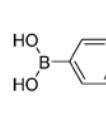
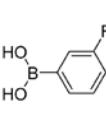
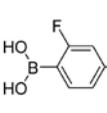
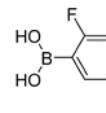
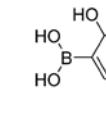
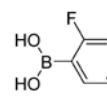
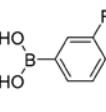
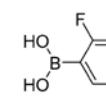
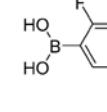
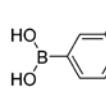
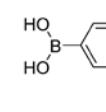
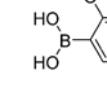
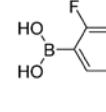
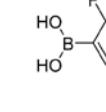
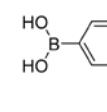
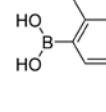
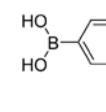
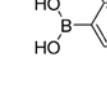
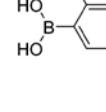
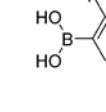
1. Boronic Acids

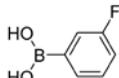
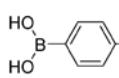
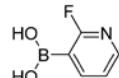
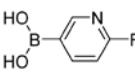
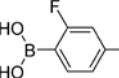
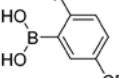
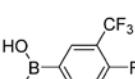
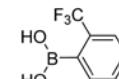
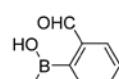
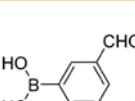
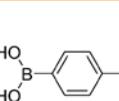
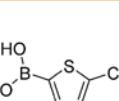
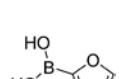
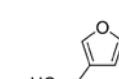
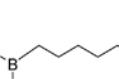
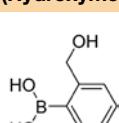
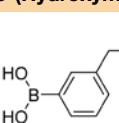
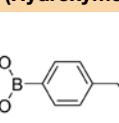
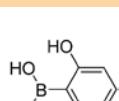
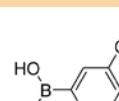
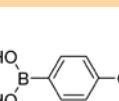
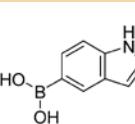
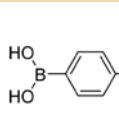
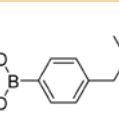
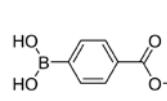
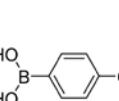
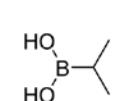
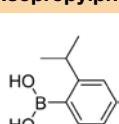
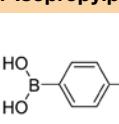
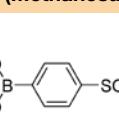
3-Acetamidophenylboronic acid	4-Acetamidophenylboronic acid	5-Acetyl-2-chlorophenylboronic acid
 36778-1A 1 g [78887-39-5]	 36761-1A 5 g 36761-2A 1 g [101251-09-6]	 01992-55 5 g 01992-65 1 g [1022922-17-3]
4-Acetyl-3-fluorophenylboronic acid	5-Acetyl-2-fluorophenylboronic acid	2-Acetylphenylboronic acid
 01993-65 1 g [481725-35-3]	 01994-55 5 g 01994-65 1 g [870777-29-0]	 35882-1A 1 g [308103-40-4]
3-Acetylphenylboronic acid	4-Acetylphenylboronic acid	5-Acetylthiophene-2-boronic acid
 35883-1A 10 g 35883-2A 1 g [204841-19-0]	 36940-1A 5 g 36940-2A 1 g [149104-90-5]	 01995-35 25 g 01995-55 5 g [206551-43-1]
3-(Aminocarbonyl)phenylboronic acid	4-Aminocarbonylphenylboronic acid	4-Aminomethylphenylboronic acid hydrochloride
 01997-55 5 g 01997-65 1 g [351422-73-6]	 01996-55 5 g 01996-65 1 g [123088-59-5]	 35884-1A 250 mg • HCl [75705-21-4]
3-Aminophenylboronic acid hemisulfate	3-Aminophenylboronic acid hydrochloride	3-Aminophenylboronic acid monohydrate
 10430-2A 5 g 10430-1A 1 g [66472-86-4]	 02001-55 5 g 02001-65 1 g [85006-23-1]	 02000-55 5 g 02000-65 1 g 35276-1A 1 g [206658-89-1]
Benzene-1,4-diboronic acid	2-Benzothienylboronic acid	4-(Benzoyloxycarbonyl)phenylboronic acid
 04079-35 25 g 04079-55 5 g [4612-26-4]	 35891-1A 5 g [98437-23-1]	 05160-55 5 g 05160-65 1 g [184000-11-1]
4-Benzylxy-3-chlorophenylboronic acid	4-Benzylxy-3,5-dimethylphenylboronic acid	2-Benzylxy-4-fluorophenylboronic acid
 05161-55 5 g 05161-65 1 g [845551-44-2]	 05162-55 5 g 05162-65 1 g [333788-94-6]	 05163-55 5 g 05163-65 1 g [848779-87-3]
2-Benzylxy-5-fluorophenylboronic acid	4-Benzylxy-3-fluorophenylboronic acid	4-Benzylxy-2-methylphenylboronic acid
 05164-55 5 g 05164-65 1 g [779331-47-4]	 05165-55 5 g 05165-65 1 g [133057-83-7]	 05166-55 5 g 05166-65 1 g [847560-49-0]
4-Benzylxy-3-methylphenylboronic acid	2-Benzylxyphenylboronic acid	3-Benzylxyphenylboronic acid
 05167-65 1 g [338454-30-1]	 05168-55 5 g 05168-65 1 g [190661-29-1]	 04993-35 25 g 04993-55 5 g 35886-1A 500 mg [156682-54-1]
4-Benzylxyphenylboronic acid	4-Biphenylboronic acid	3,5-Bis(trifluoromethyl)benzeneboronic acid
 04994-55 5 g 04994-65 1 g [146631-00-7]	 05169-55 5 g 05169-65 1 g [5122-94-1]	 35136-1A 5 g 35136-2A 1 g [73852-19-4]

2,4-Bis(trifluoromethyl)phenylboronic acid	05170-55 05170-65 [153254-09-2]	5 g 1 g		4-Bromoacetyl-3-fluorophenylboronic acid	05171-65 [481725-36-4]	1 g		4-Bromo-2,3-difluorophenylboronic acid	05172-55 05172-65 [374790-99-5]	5 g 1 g	
3-Bromomethylphenylboronic acid	05174-55 05174-65 [51323-43-4]	5 g 1 g		4-Bromomethylphenylboronic acid	05175-55 05175-65 [68162-47-0]	5 g 1 g		2-Bromophenylboronic acid	37999-1A 37999-2A [244205-40-1]	5 g 25 g	
3-Bromophenylboronic acid	04447-35 04447-55 35894-1A 35894-2A [89598-96-9]	25 g 5 g 5 g 1 g		4-Bromophenylboronic acid	04743-35 04743-55 [5467-74-3]	25 g 5 g		2-Bromopyridine-3-boronic acid	04745-35 04745-55 [452972-08-6]	25 g 5 g	
5-Bromothiophene-2-boronic acid	35896-1A [162607-17-2]	500 mg		n-Butylboronic acid	04365-35 04365-55 17238-1A 17238-2A [4426-47-5]	25 g 5 g 5 g 1 g		4-tert-Butylphenylboronic acid	04374-35 04374-55 35897-1A [123324-71-0]	25 g 5 g 5 g	
4-Carboxy-3-chlorophenylboronic acid	08310-65 [136496-72-5]	1 g		2-Carboxy-5-fluorophenylboronic acid	08311-65 [874290-62-7]	1 g		3-Carboxy-4-fluorophenylboronic acid	08312-55 08312-65 [872460-12-3]	5 g 1 g	
4-Carboxy-3-fluorophenylboronic acid	08313-55 08313-65 [120153-08-4]	5 g 1 g		3-Carboxy-5-nitrophenylboronic acid	08314-55 08314-65 [101084-81-5]	5 g 1 g		4-Carboxy-2-nitrophenylboronic acid	08315-55 08315-65 [85107-54-6]	5 g 1 g	
2-Carboxyphenylboronic acid	08316-55 08316-65 [149105-19-1]	5 g 1 g		3-Carboxyphenylboronic acid	08318-35 08318-55 34463-1A 34463-2A [25487-66-5]	25 g 5 g 5 g 1 g		4-Carboxyphenylboronic acid	08317-35 08317-55 34440-1A 34440-2A [14047-29-1]	25 g 5 g 5 g 1 g	
2-Chloro-5-cyanophenylboronic acid	08319-55 08319-65 [936249-33-1]	5 g 1 g		3-Chloro-4-ethoxyphenylboronic acid	08320-55 08320-65 [279261-81-3]	5 g 1 g		2-Chloro-4-fluorophenylboronic acid	08321-55 08321-65 [313545-72-1]	5 g 1 g	
2-Chloro-5-fluorophenylboronic acid	08322-65 [444666-39-1]	1 g		3-Chloro-4-fluorophenylboronic acid	07288-35 07288-55 36768-1A 36768-2A [144432-85-9]	25 g 5 g 5 g 1 g		3-Chloro-5-fluorophenylboronic acid	07290-55 07290-65 [328956-61-2]	5 g 1 g	
4-Chloro-2-fluorophenylboronic acid	07289-55 07289-65 [160591-91-3]	5 g 1 g		4-Chloro-3-fluorophenylboronic acid	08323-55 08323-65 [137504-86-0]	5 g 1 g		2-Chloro-5-formylphenylboronic acid	08324-55 08324-65 [1150114-78-5]	5 g 1 g	

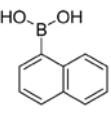
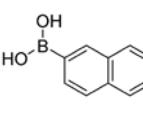
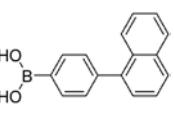
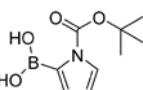
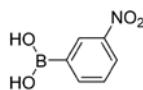
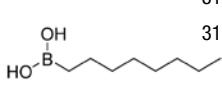
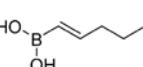
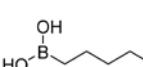
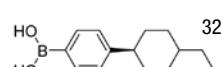
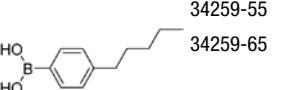
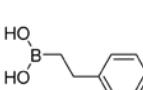
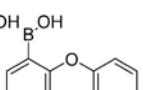
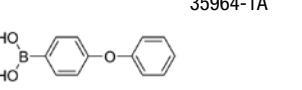
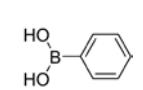
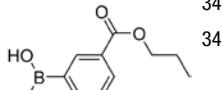
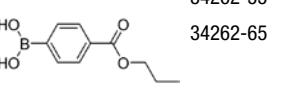
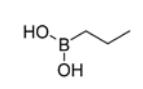
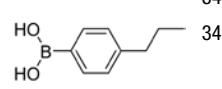
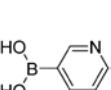
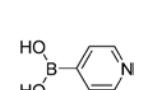
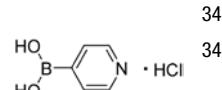
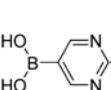
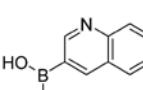
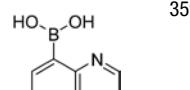
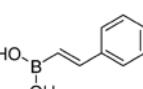
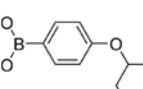
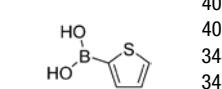
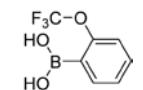
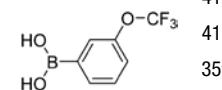
2-Chloro-5-hydroxymethylphenylboronic acid	08325-55 08325-65 [1003042-59-8]	5 g 1 g		2-Chloro-4-methoxyphenylboronic acid	07300-55 07300-65 [219735-99-6]	5 g 1 g		3-Chloro-4-methoxyphenylboronic acid	08326-55 08326-65 [175883-60-0]	5 g 1 g
2-Chloro-4-methylphenylboronic acid	08327-65 [145349-62-8]	1 g		2-Chloro-5-methylphenylboronic acid	08328-55 08328-65 [193353-35-4]	5 g 1 g		3-Chloro-4-methylphenylboronic acid	08329-55 08329-65 [175883-63-3]	5 g 1 g
4-Chloro-2-methylphenylboronic acid	08330-55 08330-65 [209919-30-2]	5 g 1 g		4-Chloro-3-methylphenylboronic acid	07304-55 07304-65 [161950-10-3]	5 g 1 g		4-Chloro-3-nitrophenylboronic acid	08331-65 [151169-67-4]	1 g
2-Chlorophenylboronic acid	07308-35 07308-55 35899-1A 35899-2A [3900-89-8]	25 g 5 g 5 g 1 g		3-Chlorophenylboronic acid	07309-35 07309-55 35900-1A [63503-60-6]	25 g 5 g 5 g		4-Chlorophenylboronic acid	07229-35 07229-55 34441-1A 34441-2A [1679-18-1]	25 g 5 g 5 g 1 g
2-Chloropyridine-3-boronic acid	08332-65 [381248-04-0]	1 g		2-Chloropyridine-5-boronic acid	07225-35 07225-55 [444120-91-6]	25 g 5 g		5-Chlorothiophene-2-boronic acid	35901-1A [162607-18-3]	1 g
2-Chloro-5-(trifluoromethoxy)phenylboronic acid	08333-65 [182344-18-9]	1 g		2-Chloro-4-(trifluoromethyl)phenylboronic acid	08334-55 08334-65 [254993-59-4]	5 g 1 g		2-Chloro-5-(trifluoromethyl)phenylboronic acid	08335-55 08335-65 [182344-18-9]	5 g 1 g
4-Chloro-2-(trifluoromethyl)phenylboronic acid	08336-55 08336-65 [313545-41-4]	5 g 1 g		4-Chloro-3-(trifluoromethyl)phenylboronic acid	08337-55 08337-65 [176976-42-4]	5 g 1 g		4-Cyano-3-fluorophenylboronic acid	08338-55 08338-65 [843663-18-3]	5 g 1 g
2-Cyanophenylboronic acid	07540-55 07540-65 36596-1A [138642-62-3]	5 g 1 g 1 g		3-Cyanophenylboronic acid	07104-35 07104-55 35903-1A [150255-96-2]	25 g 5 g 1 g		4-Cyanophenylboronic acid	35904-1A [126747-14-6]	1 g
5-Cyanothiophene-2-boronic acid	07536-35 07536-55 [30583-67-1]	25 g 5 g		Cyclohexylboronic acid	07564-55 07564-65 35905-1A 35905-2A [4441-56-9]	5 g 1 g 5 g 1 g		Cyclopropylboronic acid	08339-55 08339-65 [411235-57-9]	5 g 1 g
2,6-Dichloro-3-formylphenylboronic acid	11866-55 11866-65 [1218790-87-4]	5 g 1 g		2,3-Dichlorophenylboronic acid	36771-1A 36771-2A [151169-74-3]	5 g 1 g		2,4-Dichlorophenylboronic acid	36767-1A 36767-2A [68716-47-2]	5 g 1 g

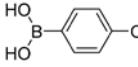
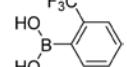
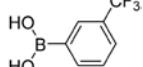
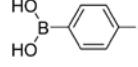
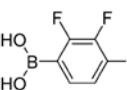
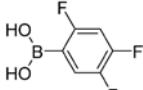
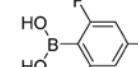
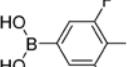
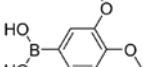
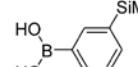
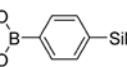
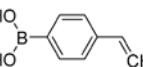
2,5-Dichlorophenylboronic acid	2,6-Dichlorophenylboronic acid	3,4-Dichlorophenylboronic acid
 11867-55 5 g 11867-65 1 g [135145-90-3]	 35911-1A 500 mg [73852-17-2]	 35909-1A 5 g [151169-75-4]
3,5-Dichlorophenylboronic acid	4-(N,N-Diethylaminocarbonyl)phenylboronic acid	(3,5-Difluoro-2-methoxyphenyl)boronic acid
 10137-35 25 g 10137-55 5 g [67492-50-6]	 10211-55 5 g 10211-65 1 g [389621-80-1]	 36582-1A 1 g [737000-76-9]
2,3-Difluoro-4-(n-hexyloxy)phenylboronic acid	2,3-Difluorophenylboronic acid	2,4-Difluorophenylboronic acid
 11868-65 1 g [121219-20-3]	 10547-35 25 g 10547-55 5 g 35912-1A 10 g 35912-2A 1 g [121219-16-7]	 35913-1A 10 g 35913-2A 1 g [144025-03-6]
2,5-Difluorophenylboronic acid	2,6-Difluorophenylboronic acid	3,4-Difluorophenylboronic acid
 35914-1A 10 g 35914-2A 1 g [193353-34-3]	 10549-35 25 g 10549-55 5 g 35915-1A 5 g 35915-2A 1 g [162101-25-9]	 35916-1A 5 g [168267-41-2]
3,5-Difluorophenylboronic acid	2,4-Dimethoxybenzeneboronic acid	2,3-Dimethoxyphenylboronic acid
 10542-35 25 g 10542-55 5 g [156545-07-2]	 35920-1A 1 g [133730-34-4]	 11870-55 5 g 11870-65 1 g [40972-86-9]
2,5-Dimethoxyphenylboronic acid	2,6-Dimethoxyphenylboronic acid	3,4-Dimethoxyphenylboronic acid
 35921-1A 5 g [107099-99-0]	 35922-1A 5 g [23112-96-1]	 36939-1A 5 g 36939-2A 1 g [122775-35-3]
3,5-Dimethoxyphenylboronic acid	4-(N,N-Diethylaminocarbonyl)phenylboronic acid	2-(N,N-Dimethylaminomethyl)phenylboronic acid
 11871-55 5 g 11871-65 1 g [192182-54-0]	 10325-55 5 g 10325-65 1 g [405520-68-5]	 35924-1A 100 mg [85107-53-5]
4-(N,N-Dimethylamino)phenylboronic acid	3,5-Dimethyl-4-isoxazoleboronic acid	2,3-Dimethylphenylboronic acid
 35923-1A 500 mg [28611-39-4]	 10329-55 5 g 10329-65 1 g 35925-1A 250 mg [16114-47-9]	 11876-55 5 g 11876-65 1 g [183158-34-1]
2,4-Dimethylphenylboronic acid	2,5-Dimethylphenylboronic acid	2,6-Dimethylphenylboronic acid
 11877-55 5 g 11877-65 1 g [55499-44-0]	 11878-55 5 g 11878-65 1 g [85199-06-0]	 35927-1A 5 g 35927-2A 1 g [100379-00-8]
3,4-Dimethylphenylboronic acid	4-Ethoxycarbonyl-3-fluorophenylboronic acid	2-(Ethoxycarbonyl)phenylboronic acid
 10334-55 5 g 10334-65 1 g 35928-1A 5 g 35928-2A 1 g [55499-43-9]	 14662-55 5 g 14662-65 1 g [874288-38-7]	 14663-55 5 g 14663-65 1 g [380430-53-5]

3-(Ethoxycarbonyl)phenylboronic acid	4-(Ethoxycarbonyl)phenylboronic acid	2-Ethoxy-5-fluorophenylboronic acid
 <p>14677-55 5 g 14677-65 1 g 35930-1A 500 mg [4334-87-6]</p>	 <p>14678-55 5 g 14678-65 1 g 36779-1A 5 g 36779-2A 1 g [4334-88-7]</p>	 <p>14664-55 5 g 14664-65 1 g [864301-27-9]</p>
4-Ethoxy-3-fluorophenylboronic acid	2-Ethoxyphenylboronic acid	3-Ethoxyphenylboronic acid
 <p>14665-55 5 g 14665-65 1 g [279263-10-4]</p>	 <p>37767-1A 10 g 37767-2A 1 g [213211-69-9]</p>	 <p>14666-55 5 g 14666-65 1 g [90555-66-1]</p>
4-Ethoxyphenylboronic acid	2-Ethoxypyridine-3-boronic acid	Ethylboronic acid
 <p>14668-35 25 g 14668-55 5 g 35931-1A 5 g 35931-2A 1 g [22237-13-4]</p>	 <p>14679-35 25 g 14679-55 5 g [854373-97-0]</p>	 <p>37086-1A 1 g [4433-63-0]</p>
2-Ethylphenylboronic acid	4-Ethylphenylboronic acid	2-Fluoro-4-biphenylboronic acid
 <p>14667-55 5 g 14667-65 1 g [90002-36-1]</p>	 <p>35932-1A 1 g [63139-21-9]</p>	 <p>16268-55 5 g 16268-65 1 g [178305-99-2]</p>
3-Fluoro-4-biphenylboronic acid	2-Fluoro-5-formylphenylboronic acid	5-Fluoro-2-hydroxyphenylboronic acid
 <p>16269-55 5 g 16269-65 1 g [409108-13-0]</p>	 <p>16099-55 5 g 16099-65 1 g [352534-79-3]</p>	 <p>16270-55 5 g 16270-65 1 g [259209-20-6]</p>
3-Fluoro-4-hydroxyphenylboronic acid	3-Fluoro-4-methoxycarbonylphenylboronic acid	2-Fluoro-3-methoxyphenylboronic acid
 <p>16184-55 5 g 16184-65 1 g</p>	 <p>16271-55 5 g 16271-65 1 g [505083-04-5]</p>	 <p>16272-55 5 g 16272-65 1 g [352303-67-4]</p>
2-Fluoro-5-methoxyphenylboronic acid	3-Fluoro-4-methoxyphenylboronic acid	3-Fluoro-5-methoxyphenylboronic acid
 <p>16107-55 5 g 16107-65 1 g [406482-19-7]</p>	 <p>16273-55 5 g 16273-65 1 g [149507-26-6]</p>	 <p>16274-65 1 g [609807-25-2]</p>
5-Fluoro-2-methoxyphenylboronic acid	2-Fluoro-4-methylphenylboronic acid	2-Fluoro-5-methylphenylboronic acid
 <p>16275-35 25 g 16275-55 5 g [179897-94-0]</p>	 <p>16277-55 5 g 16277-65 1 g [170981-26-7]</p>	 <p>16113-55 5 g 16113-65 1 g [166328-16-1]</p>
3-Fluoro-4-methylphenylboronic acid	4-Fluoro-2-methylphenylboronic acid	4-Fluoro-3-methylphenylboronic acid
 <p>16276-55 5 g 16276-65 1 g [168267-99-0]</p>	 <p>16111-55 5 g 16111-65 1 g 36794-1A 5 g 36794-2A 1 g [139911-29-8]</p>	 <p>16279-35 25 g 16279-55 5 g [139911-27-6]</p>
5-Fluoro-2-methylphenylboronic acid	2-Fluoro-5-nitrophenylboronic acid	2-Fluorophenylboronic acid
 <p>16280-55 5 g 16280-65 1 g [163517-62-2]</p>	 <p>16281-65 1 g [425378-68-3]</p>	 <p>16217-35 25 g 16217-55 5 g 35934-1A 5 g 35934-2A 1 g [1993-03-9]</p>

3-Fluorophenylboronic acid	4-Fluorophenylboronic acid	2-Fluoropyridine-3-boronic acid
 16126-35 25 g 16126-55 5 g 34564-1A 5 g 34564-2A 1 g [768-35-4]	 16092-32 25 g 16092-52 5 g 33410-1A 5 g 33410-2A 1 g [1765-93-1]	 16282-55 5 g 16282-65 1 g [174669-73-9]
2-Fluoropyridine-5-boronic acid	2-Fluoro-4-(trifluoromethyl)phenylboronic acid	2-Fluoro-5-(trifluoromethyl)phenylboronic acid
 16283-55 5 g 16283-65 1 g [351019-18-6]	 16287-55 5 g 16287-65 1 g [503309-11-3]	 16285-55 5 g 16285-65 1 g [352535-96-7]
4-Fluoro-3-(trifluoromethyl)phenylboronic acid	5-Fluoro-2-(trifluoromethyl)phenylboronic acid	2-Formylphenylboronic acid
 16284-55 5 g 16284-65 1 g [182344-23-6]	 16286-55 5 g 16286-65 1 g [928053-97-8]	 35936-2A 5 g 35936-1A 1 g [40138-16-7]
3-Formylphenylboronic acid	4-Formylphenylboronic acid	5-Formylthiophene-2-boronic acid
 16202-35 25 g 16202-55 5 g 35937-2A 5 g 35937-1A 1 g [87199-16-4]	 35938-2A 5 g 35938-1A 1 g [87199-17-5]	 16288-55 5 g 16288-65 1 g [4347-33-5]
2-Furylboronic acid	3-Furylboronic acid	n-Heptylboronic acid
 16049-55 5 g 16049-65 1 g 35939-1A 1 g [13331-23-2]	 16050-55 5 g 16050-65 1 g 35940-1A 500 mg 35940-2A 100 mg [55552-70-0]	 18027-55 5 g 18027-65 1 g [28741-07-3]
2-(Hydroxymethyl)phenylboronic acid	3-(Hydroxymethyl)phenylboronic acid	4-(Hydroxymethyl)phenylboronic acid
 18670-55 5 g 18670-65 1 g [87199-14-2]	 36772-1A 5 g 36772-2A 1 g [87199-15-3]	 18357-55 5 g 18357-65 1 g 36947-1A 5 g 36947-2A 1 g [59016-93-2]
2-Hydroxyphenylboronic acid	3-Hydroxyphenylboronic acid	4-Hydroxyphenylboronic acid
 18671-55 5 g 18671-65 1 g [89466-08-0]	 18363-55 5 g 18363-65 1 g 35941-1A 250 mg [87199-18-6]	 18672-55 5 g 18672-65 1 g 36942-1A 5 g 36942-2A 1 g [71597-85-8]
5-Indolylboronic acid	4-Iodophenylboronic acid	4-Isobutylphenylboronic acid
 35946-1A 500 mg 35946-2A 100 mg [144104-59-6]	 35948-1A 1 g 35948-2A 5 g [5122-99-6]	 20336-55 5 g 20336-65 1 g [153624-38-5]
4-Isopropoxycarbonylphenylboronic acid	4-Isopropoxyphenylboronic acid	Isopropylboronic acid
 36941-1A 5 g 36941-2A 1 g [342002-82-8]	 20337-55 5 g 20337-65 1 g [153624-46-5]	 37088-1A 1 g [80041-89-0]
2-Isopropylphenylboronic acid	4-Isopropylphenylboronic acid	4-(Methanesulfonyl)phenylboronic acid
 20338-65 1 g [89787-12-2]	 20339-55 5 g 20339-65 1 g [16152-51-5]	 35951-1A 1 g [149104-88-1]

3-Methoxycarbonyl-5-nitrophenylboronic acid	26160-55 26160-65 [117342-20-8]	5 g 1 g		4-Methoxycarbonyl-2-nitrophenylboronic acid	26161-55 26161-65 [85107-55-7]	5 g 1 g		2-(Methoxycarbonyl)phenylboronic acid	25812-55 25812-65 [374538-03-1]	5 g 1 g
3-(Methoxycarbonyl)phenylboronic acid	25811-35 25811-55 36983-1A 36983-2A [99769-19-4]	25 g 5 g 5 g 1 g		4-(Methoxycarbonyl)phenylboronic acid	25810-35 25810-55 35956-1A [99768-12-4]	25 g 5 g 500 mg		3-Methoxy-4-carboxyphenylboronic acid	26162-55 26162-65 [851335-12-1]	5 g 1 g
2-Methoxy-4-fluorophenylboronic acid	26163-55 26163-65 [179899-07-1]	5 g 1 g		2-Methoxy-5-formylphenylboronic acid	35954-1A [127972-02-5]	250 mg		2-Methoxy-5-methylphenylboronic acid	26165-55 26165-65 [127972-00-3]	5 g 1 g
4-Methoxy-2-methylphenylboronic acid	26166-55 26166-65 [208399-66-0]	5 g 1 g		6-Methoxy-2-naphthaleneboronic acid	26167-55 26167-65 [156641-98-4]	5 g 1 g		2-Methoxyphenylboronic acid	25124-35 25124-55 34466-1A 34466-2A [5720-06-9]	25 g 5 g 5 g 1 g
3-Methoxyphenylboronic acid	35957-3A 35957-1A 35957-2A [10365-98-7]	10 g 5 g 1 g		4-Methoxyphenylboronic acid	25125-35 25125-55 30948-1A [5720-07-0]	25 g 5 g 1 g		2-Methoxypyridine-3-boronic acid	25833-55 25833-65 [163105-90-6]	5 g 1 g
2-Methoxypyridine-5-boronic acid	25821-55 25821-65 35955-1A [163105-89-3]	5 g 1 g 100 mg		4-Methoxy-3-pyridineboronic acid	37838-1A [355004-67-0]	250 mg		Methylboronic acid	25713-55 25713-65 [13061-96-6]	5 g 1 g
3,4-Methylenedioxyphenylboronic acid	35958-1A [94839-07-3]	1 g		2-Methylphenylboronic acid	25736-35 25736-55 30926-2A 30926-1A [16419-60-6]	25 g 5 g 5 g 1 g		3-Methylphenylboronic acid	25737-35 25737-55 34442-1A 34442-2A [17933-03-8]	25 g 5 g 5 g 1 g
4-Methylphenylboronic acid	25735-35 25735-55 34443-1A 34443-2A [5720-05-8]	25 g 5 g 5 g 1 g		(2-Methylpropyl)boronic acid	35995-1A 35995-2A [84110-40-7]	5 g 1 g		3-(Methylsulfonyl)phenylboronic acid	25743-55 25743-65 [373384-18-0]	5 g 1 g
4-(Methylsulfonyl)phenylboronic acid	26170-55 26170-65 [149104-88-1]	5 g 1 g		3-Methylthiophene-2-boronic acid	26168-35 26168-55 [177735-09-0]	25 g 5 g		4-Methylthiophene-2-boronic acid	35960-1A [162607-15-0]	500 mg
5-Methyl-2-thiopheneboronic acid	25747-55 25747-65 35961-1A [162607-20-7]	5 g 1 g 1 g		2-(Methylthio)phenylboronic acid	26171-55 26171-65 [168618-42-6]	5 g 1 g		4-(Methylthio)phenylboronic acid	34468-1A 34468-2A [98546-51-1]	5 g 1 g

1-Naphthaleneboronic acid	2-Naphthaleneboronic acid	4-(Naphthalene-1-yl)phenylboronic acid
 28022-35 25 g 28022-55 5 g 34469-1A 5 g 34469-2A 1 g [13922-41-3]	 28033-35 25 g 28033-55 5 g 35962-1A 1 g [32316-92-0]	 28718-55 5 g 28718-65 1 g [870774-25-7]
N-Boc-2-pyrrolylboronic acid	3-Nitrophenylboronic acid	n-Octylboronic acid
 04779-55 5 g 04779-65 1 g	 28296-35 25 g 28296-55 5 g 34470-1A 5 g 34470-2A 1 g [13331-27-6]	 31518-55 5 g 31518-65 1 g [28741-08-4]
1-Pentenylboronic acid	n-Pentylboronic acid	4-(trans-4-Pentylcyclohexyl)phenylboronic acid
 36595-1A 1 g [104376-24-1]	 32616-35 25 g 32616-55 5 g [4737-50-2]	 32609-22 100 g 32609-32 25 g [143651-26-7]
4-n-Pentylphenylboronic acid	Phenethylboronic acid	Phenoxythiin-4-boronic acid
 34259-55 5 g 34259-65 1 g [121219-12-3]	 34260-35 25 g 34260-55 5 g [34420-17-2]	 35963-1A 100 mg [100124-07-0]
4-Phenoxyphenylboronic acid	Phenylboronic acid	3-(Propoxycarbonyl)phenylboronic acid
 35964-1A 1 g [51067-38-0]	 32110-15 250 g 32110-35 25 g 13036-1A 10 g 13036-2A 50 g 13036-3A 250 g [98-80-6]	 34261-55 5 g 34261-65 1 g [850568-78-4]
4-(Propoxycarbonyl)phenylboronic acid	n-Propylboronic acid	4-Propylphenylboronic acid
 34262-55 5 g 34262-65 1 g [91062-38-3]	 37087-1A 1 g [17745-45-8]	 34263-55 5 g 34263-65 1 g [134150-01-9]
Pyridine-3-boronic acid	Pyridine-4-boronic acid	Pyridine-4-boronic acid hydrochloride
 32523-55 5 g 32523-65 1 g 35965-1A 250 mg [1692-25-7]	 32304-35 25 g 32304-55 5 g [1692-15-5]	 34364-55 5 g 34364-65 1 g [913835-65-1]
5-Pyrimidinylboronic acid	3-Quinoline boronic acid	8-Quinoline boronic acid
 32478-35 25 g 32478-55 5 g [109299-78-7]	 36773-1A 5 g 36773-2A 1 g [191162-39-7]	 35967-1A 250 mg [86-58-8]
trans-β-Styreneboronic acid	[4-(2-Tetrahydropyranoyloxy)phenyl]boronic acid	2-Thiopheneboronic acid
 35968-1A 500 mg [6783-05-7]	 40734-55 5 g 40734-65 1 g [182281-01-2]	 40418-35 25 g 40418-55 5 g 34471-1A 5 g 34471-2A 1 g [6165-68-0]
3-Thiopheneboronic acid	2-(Trifluoromethoxy)phenylboronic acid	3-(Trifluoromethoxy)phenylboronic acid
 40132-35 25 g 40132-55 5 g 34566-1A 5 g 34566-2A 1 g [6165-69-1]	 41168-55 5 g 41168-65 1 g [175676-65-0]	 41185-55 5 g 41185-65 1 g 35972-1A 1 g [179113-90-7]

4-(Trifluoromethoxy)phenylboronic acid	2-Trifluoromethylphenylboronic acid	3-(Trifluoromethyl)phenylboronic acid
		
41167-35 25 g 41167-55 5 g 35973-1A 1 g [139301-27-2]	35974-1A 500 mg [1423-27-4]	41169-55 5 g 41169-65 1 g 35975-1A 1 g [1423-26-3]
4-Trifluoromethylphenylboronic acid	2,3,4-Trifluorophenylboronic acid	2,4,5-Trifluorophenylboronic acid
		
40972-35 25 g 40972-55 5 g 35976-1A 500 mg [128796-39-4]	41171-55 5 g 41171-65 1 g [226396-32-3]	41170-55 5 g 41170-65 1 g [247564-72-3]
2,4,6-Trifluorophenylboronic acid	3,4,5-Trifluorophenylboronic acid	3,4,5-Trimethoxyphenylboronic acid
		
41172-55 5 g 41172-65 1 g [182482-25-3]	41190-55 5 g 41190-65 1 g 36819-1A 1 g 36819-2A 250 mg [143418-49-9]	35977-1A 1 g [182163-96-8]
3-(Trimethylsilyl)phenylboronic acid	4-(Trimethylsilyl)phenylboronic acid	4-Vinylphenylboronic acid
		
40941-55 5 g 40941-65 1 g [177171-16-3]	40943-35 25 g 40943-55 5 g [17865-11-1]	44053-55 5 g 44053-65 1 g [2156-04-9]

2. Boronic Acid Esters

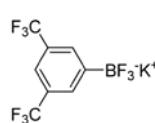
2-Allyl-4,4,5,5-tetramethyl-1,3,2-dioxaborolane	01129-52 01129-62 [72824-04-5]	5 g 1 g		4-(Benzo-1,3,2-dioxaborinan-2-yl)chlorobenzene	05159-55 05159-65	5 g 1 g		1-Benzyl-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-1H-pyrazole	37176-1A 37176-2A [761446-45-1]	1 g 250 mg
N-Boc-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-1H-pyrazole	04828-55 04828-65 [552846-17-0]	5 g 1 g		tert-Butyl-N-[4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]carbamate	36635-1A 36635-2A [330793-01-6]	5 g 1 g		4-(5,5-Dimethyl-1,3,2-dioxaborinan-2-yl)benzaldehyde	11872-55 11872-65 [128376-65-8]	5 g 1 g
4-(5,5-Dimethyl-1,3,2-dioxaborinan-2-yl)benzoic acid	11873-55 11873-65 [62729-39-9]	5 g 1 g		4-(5,5-Dimethyl-1,3,2-dioxaborinan-2-yl)chlorobenzene	11874-55 11874-65 [585524-80-7]	5 g 1 g		4-(5,5-Dimethyl-1,3,2-dioxaborinan-2-yl)methylbenzene	11875-55 11875-65 [380481-66-3]	5 g 1 g
2,6-Dimethyl-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenol	36753-1A 36753-2A [269410-25-5]	5 g 1 g		Di-n-butoxyborylbenzene	11879-55 11879-65 [7330-48-5]	5 g 1 g		3-(1,3,2-Dioxaborinan-2-yl)benzaldehyde	11880-55 11880-65 [478930-25-5]	5 g 1 g
4-(1,3,2-Dioxaborinan-2-yl)benzoic acid	11881-55 11881-65 [126747-13-5]	5 g 1 g		4-(1,3,2-Dioxaborinan-2-yl)chlorobenzene	11882-55 11882-65 [373384-13-5]	5 g 1 g		(1,3,2-Dioxaborinan-2-yl)cyclohexane	11883-55 11883-65 [30169-75-6]	5 g 1 g
3-(1,3,2-Dioxaborinan-2-yl)phenol	11884-55 11884-65 [948592-64-1]	5 g 1 g		Ethyl 4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)benzoate	36636-1A 36636-2A [195062-62-5]	5 g 1 g		2-Isopropoxy-4,4,5,5-tetramethyl-1,3,2-dioxaborolane	20204-35 35949-2A [61676-62-8]	25 mL 1 g
2-Methoxy-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenol	36754-1A 36754-2A [269410-22-2]	5 g 1 g		1-Methyl-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-1H-pyrazole	25745-55 25745-65 [761446-44-0]	5 g 1 g		1-Methyl-5-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-1H-pyrazole	25744-55 25744-65 [847818-74-0]	5 g 1 g
Pinacolborane	32247-35 37163-1A 37163-2A [25015-63-8]	25 mL 5 g 25 g		4-Pyrazoleboronic acid pinacol ester	32273-52 32273-62 [269410-08-4]	5 g 1 g		4-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)acetanilide	36637-1A [214360-60-8]	
2-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)aniline	36756-1A 36756-2A [191171-55-8]	5 g 1 g		3-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)aniline	36759-1A 36759-2A [210907-84-9]	5 g 1 g		4-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)aniline	40391-35 40391-55 36638-1A 36638-2A [214360-73-3]	25 g 5 g 5 g 1 g
4-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)benzaldehyde	41166-55 41166-65 [128376-64-7]	5 g 1 g		3-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)benzoic acid	36757-1A 36757-2A [269409-73-6]	5 g 1 g		4-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)benzoic acid	36639-1A 36639-2A [180516-87-4]	5 g 1 g

4-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)benzonitrile	36643-1A 36643-2A [171364-82-2]	5 g 1 g		2-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)phenol	36640-1A 36640-2A [269409-97-4]	5 g 1 g		3-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)phenol	36641-1A 36641-2A [214360-76-6]	5 g 1 g
4-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)phenol	40460-55 40460-65 36642-1A [269409-70-3]	5 g 1 g 5 g		N-[4-(4,4,5,5-Tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]succinamic acid	36758-1A [480424-98-4]	5 g		4,4,5,5-Tetramethyl-2-vinyl-1,3,2-dioxaborolane	41019-32 41019-52 [75927-49-0]	25 g 5 g
(4,4,6-Trimethyl-1,3,2-dioxaborinan-2-yl)benzene	41173-55 41173-65 [15961-35-0]	5 g 1 g		4-(4,4,6-Trimethyl-1,3,2-dioxaborinan-2-yl)fluorobenzene	41174-55 41174-65 [173341-99-6]	5 g 1 g		4-(4,4,6-Trimethyl-1,3,2-dioxaborinan-2-yl)methoxybenzene	41175-55 41175-65 [95010-17-6]	5 g 1 g
3-(4,4,6-Trimethyl-1,3,2-dioxaborinan-2-yl)methylbenzene	41176-55 41176-65 [253342-48-2]	5 g 1 g		Tris(dimethylamino)borane	35980-1A [4375-83-1]	100 mg		2,4,6-Trivinylcyclotriboroxane-pyridine complex	37276-1A [95010-17-6]	1 g

3. Organic Trifluoroborate Potassium Salt

Allyl trifluoroborate potassium salt	Potassium 3-trifluoroboratopropionate ethyl ester	Cyclopropyl trifluoroborate potassium salt
01640-65 1 g [233664-53-4] 	34376-65 1 g [1023357-64-3] 	07664-65 1 g [1065010-87-8]
Potassium 3-trifluoroboratopropionate methyl ester	Potassium bromomethyl trifluoroborate	Potassium isopropenyltrifluoroborate
34377-65 1 g [1023357-63-2] 	34370-65 1 g [888711-44-2] 	34378-65 1 g [395083-14-4]
Potassium 1-methyl-4-trifluoroboratomethylpiperazine	Potassium thiophene-2-trifluoroborate	Potassium 1-trifluoroboratomethylmorpholine
34371-65 1 g [1015484-22-6] 	34379-65 1 g [906674-55-3] 	34372-65 1 g [936329-94-1]
Potassium 5-methylfuran-2-trifluoroborate	Potassium 1-trifluoroboratomethylpiperidine	Potassium cyclopentyltrifluoroborate
34380-65 1 g [1111213-54-7] 	34373-65 1 g [888711-54-4] 	34381-65 1 g [1040745-70-7]
Potassium 1-trifluoroboratomethylpyrrolidine	Potassium cyclohexyltrifluoroborate	Potassium 3-trifluoroboratopropionate, <i>tert</i>-butyl ester
34374-65 1 g [888711-53-3] 	34382-65 1 g [446065-11-8] 	34375-65 1 g [1023357-66-5]
Potassium 1-hexynyltrifluoroborate	Potassium 2-fluoro-5-formylphenyltrifluoroborate	Potassium 4-formylphenyltrifluoroborate
34383-65 1 g [244301-59-5] 	34384-65 1 g [1012868-70-0] 	34393-65 1 g [374564-36-0]
Potassium thiophen-3-yltrifluoroborate	Potassium octyltrifluoroborate	Potassium furan-2-yltrifluoroborate
34385-65 1 g [192863-37-9] 	34394-65 1 g [329976-79-6] 	34386-65 1 g [166328-14-9]
Potassium sec-butyltrifluoroborate	Potassium benzo[b]thiophene-2-yltrifluoroborate	Potassium isopropyltrifluoroborate
34395-65 1 g [958449-00-8] 	34387-65 1 g [661465-45-8] 	34396-65 1 g [1041642-13-0]
Potassium benzofuran-2-yltrifluoroborate	Potassium 2,6-difluorophenyltrifluoroborate	Potassium (Z)-4-phenylbutenyl-1-trifluoroborate
34388-65 1 g [929626-27-7] 	34397-65 1 g [267006-25-7] 	34389-65 1 g [852623-46-2]
n-Pentyltrifluoroborate potassium salt	Potassium 4-(trifluoromethyl)phenyltrifluoroborate	Potassium pyridin-3-yltrifluoroborate
34398-65 1 g [872054-60-9] 	34391-65 1 g [166328-08-1] 	34399-65 1 g [561328-69-6]

Potassium 3,5-bis(trifluoromethyl)phenyltrifluoroborate



34392-65

1 g

[166328-09-2]

4. Buchwald Ligand

Cross-coupling reaction is well known as one of useful method in Organic Synthetic Chemistry, used widely in many fields, for example, pharmaceuticals, biologically active substances and Material for organic electronics.

We Kanto Chemical place a new product, Biarylphosphine Ligand which is developed by Professor Stephen L. Buchwald of Massachusetts Institute of Technology (MIT) on the market.

Features

- Useful for reaction using aryl chloride and tosylate as substrate.
- Useful for reaction using aryl compounds (which has large steric hindrance as substrate).
- Not only for "Lab use(scale)", but also for "Production use(scale)".

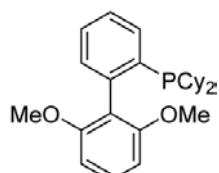
Product List

SPhos

2-Dicyclohexylphosphino-2',6'-dimethoxybiphenyl

[657408-07-6] >97.0%

11049-55 5 g
11049-65 1 g

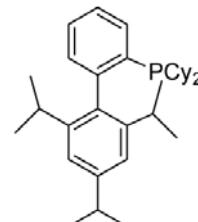


XPhos

2-Dicyclohexylphosphino-2',4',6'-triisopropylbiphenyl

[564483-18-7] >98.0%

11051-35 25 g
11051-55 5 g
11051-65 1 g

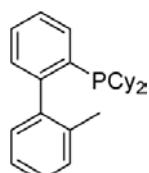


MePhos

2-Dicyclohexylphosphino-2'-methylbiphenyl

[251320-86-2] >97.0%

11054-55 5 g
11054-65 1 g

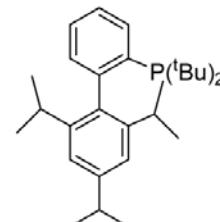


tBuXPhos

2-Di-tert-butylphosphino-2',4',6'-triisopropylbiphenyl

[564483-19-8] >98.0%

11055-55 5 g
11055-65 1 g

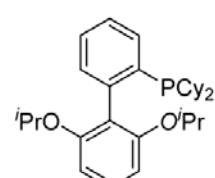


RuPhos

2-Dicyclohexylphosphino-2',6'-diisopropoxypybiphenyl

[787618-22-8] >98.0%

11057-55 5 g
11057-65 1 g

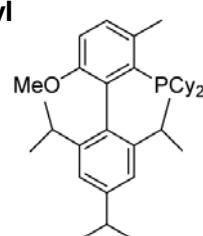


BrettPhos

2-Dicyclohexylphosphino-3,6-dimethoxy-2',4',6'-triisopropylbiphenyl

[1070663-78-3] >98.0%

11058-65 1 g
11058-68 100 mg

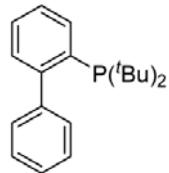


JohnPhos

2-(Di-*tert*-butylphosphino)biphenyl

[224311-51-7] >98.0%

11059-55 5 g
11059-65 1 g

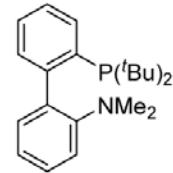


tBuDavePhos

2-Di-*tert*-butylphosphino-2'-(*N,N*-dimethylamino)biphenyl

[224311-49-3] >97.0%

11061-55 5 g
11061-65 1 g

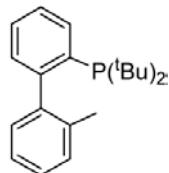


tBuMePhos

2-Di-*tert*-butylphosphino-2'-methylbiphenyl

[255837-19-5] >98.0%

11062-65 1 g
11062-68 100 mg

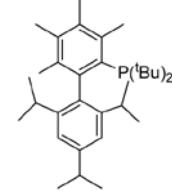


Me4tBuXPhos

2-Di-*tert*-butylphosphino-3,4,5,6-tetramethyl-2',4',6'-triisopropylbiphenyl

[857356-94-6] >98.0%

11063-65 1 g
11063-68 100 mg

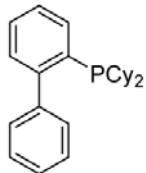


CyJohnPhos

2-(Dicyclohexylphosphino)biphenyl

[247940-06-3] >98.0%

11070-55 5 g
11070-65 1 g

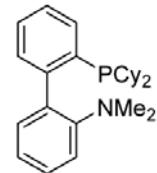


DavePhos

2-Dicyclohexylphosphino-2'-(*N,N*-dimethylamino)biphenyl

[213697-53-1] >98.0%

11071-55 5 g
11071-65 1 g

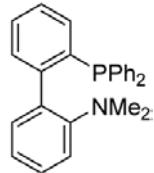


PhDavePhos

2-Diphenylphosphino-2'-(*N,N*-dimethylamino)biphenyl

[240417-00-9] >98.0%

11075-55 5 g
11075-65 1 g

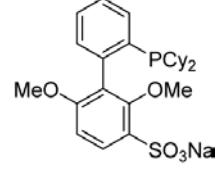


SPhos-SO3Na

Sodium 2'-dicyclohexylphosphino-2,6-dimethoxybiphenyl-3-sulfonate hydrate

[1049726-96-6] >98.0%

38010-65 1 g
38010-68 100 mg



Manufacturer : Nippon Chemical Industrial Co., LTD.

MIT Licensed patent

These products are applied for a patent as follows in Japan.

Japanese patent application No. 2000-559117, 2002-583366,
2005-508499, 2007-550475, 2008-276608

5. Amphos

[4 - (N,N - Dimethylamino)phenyl]di - tert - butylphosphine (Amphos) is available from Kanto Chemical. This ligand is highly active because it has high-electron-releasing tBu and also stable, then recently it attracts attention from catalytic chemical fields.

Features

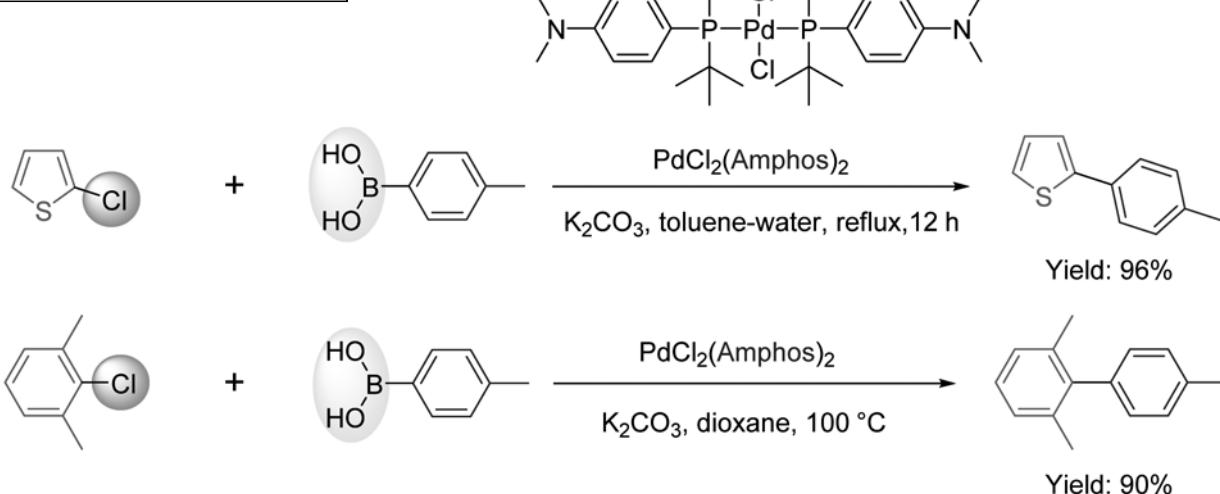
- Stable & Low enzyme inactivation, possible to handle in air.
- Useful for various type cross-coupling reactions
Ex) Suzuki-Miyaura reaction, Buchwald-Hartwig reaction, Negishi reaction

Product List

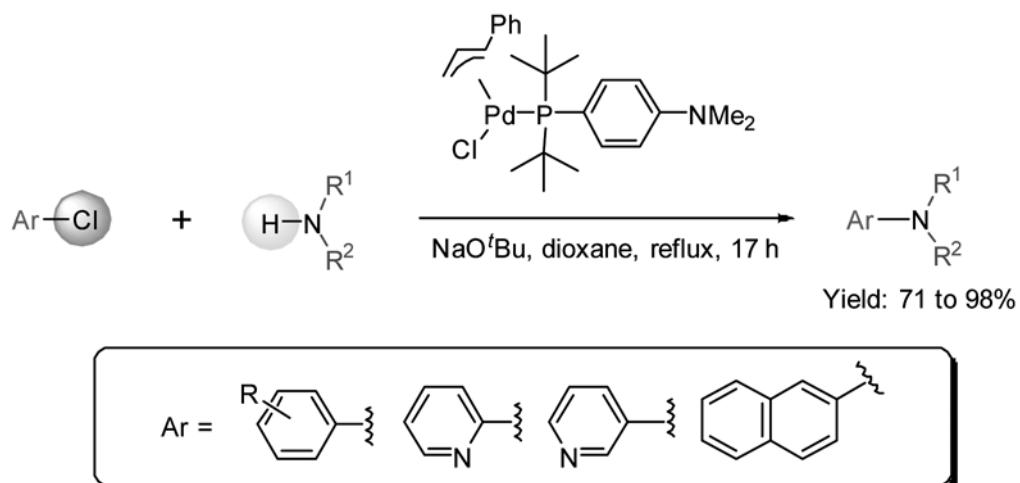
Product Name	Cat. No.	Packing
[4-(N,N-Dimethylamino)phenyl]di-tert-butylphosphine [932710-63-9] FW : 265.37	11335-55	5 g
	11335-65	1 g

Example of Reaction

Suzuki-Miyaura Coupling ¹⁾



Buchwald-Hartwig Coupling²⁾



~ Cross Coupling Ligands and Pd-Catalysts ~

	Cat.No	Product Name	Structure	Suzuki-Miyaura	Buchwald-Hartwig	Negishi	Sonogashira	Stability (under Air)
Ligand	11335-55	Amphos		○	○	○		○
	11335-65							
Buckwald Ligand	11051-55	XPhos [564483-18-7] 2-Dicyclohexylphosphino-2',4',6'-triisopropylbiphenyl FW : 476.72		○	○			○
	11051-65							
Pd-Catalyst	11049-55	SPhos [657408-07-6] 2-Dicyclohexylphosphino-2',6'-dimethoxybiphenyl FW : 410.53		○	○			○
	11049-65							
Pd-Catalyst	40864-35	Pd(PPh₃)₄ [14221-01-3] Tetrakis (triphenylphosphine) palladium(0) FW : 1155.56		○		○	○	✗
	40864-55							
	40864-65							
	34868-1A	Pd(dppf)Cl₂·CH₂Cl₂ [95464-05-4] [1,1'-Bis(diphenylphosphino)ferrocene] palladium(II) Dichloride FW : 816.64		○		○		○

[Reference]

- 1) A. S. Guram, et. al., *J. Org. Chem.*, 2007, 72, 5104-5112.
- 2) C. Anthony, et. al., *Organomet.*, 2011, 30, 4432-4436.

6. Phosphonium Borate Derivatives

Reaction such as Suzuki coupling, Sonogashira Coupling, Heck Reaction and Hartwig-Buchwald Coupling using Palladium complex which have a trialkyl phosphine ligand as catalyst is very useful reaction in the organic synthesis field.

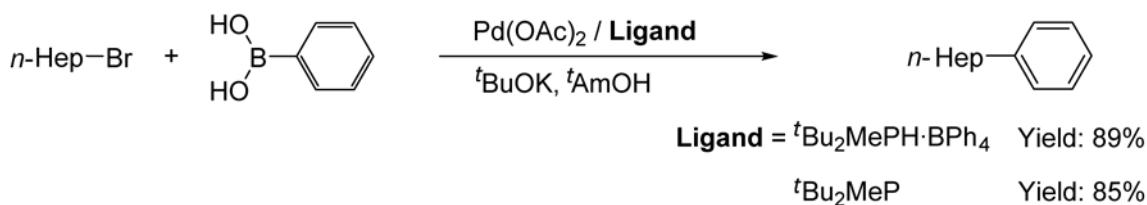
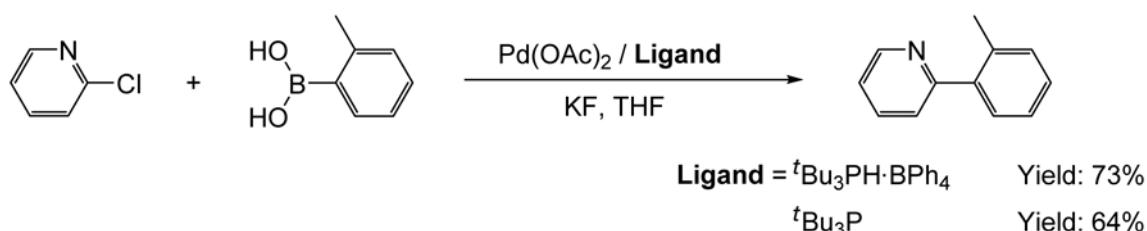
However, there is some cases which it's difficult to handle because Trialkyl phosphine is susceptible to be oxidized in air. We Kanto Chemical launched product which has similar characteristics with trialkyl phosphine and is easily to handle, "Phosphonium borate".

Product List

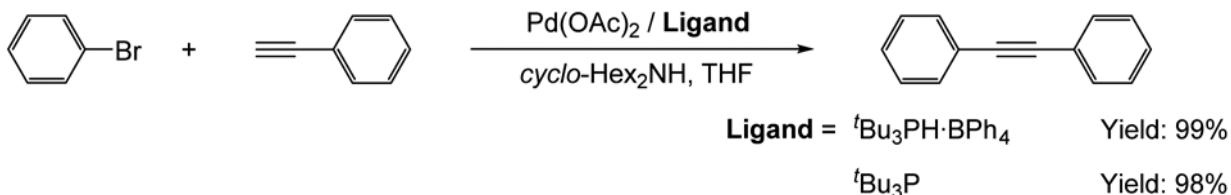
Product Name	Cat. No.	Packing
Tri-<i>tert</i>-butylphosphonium tetraphenylborate C ₃₆ H ₄₈ BP FW : 522.55 [131322-08-2] Appearance : White-Pale yellow powder Stability : Stable in the air (Normal temperature) Content : 37-40 % (as P(<i>t</i> -Bu) ₃)	41128-45	10 g
Di-<i>tert</i>-butylmethylphosphonium tetraphenylborate C ₃₃ H ₄₂ BP FW : 480.47 Appearance : White-Pale yellow powder Stability : Stable in the air (Normal temperature) Content : 37-40 % (as P(<i>t</i> -Bu) ₂ Me)	41129-45	10 g

Example of Reaction

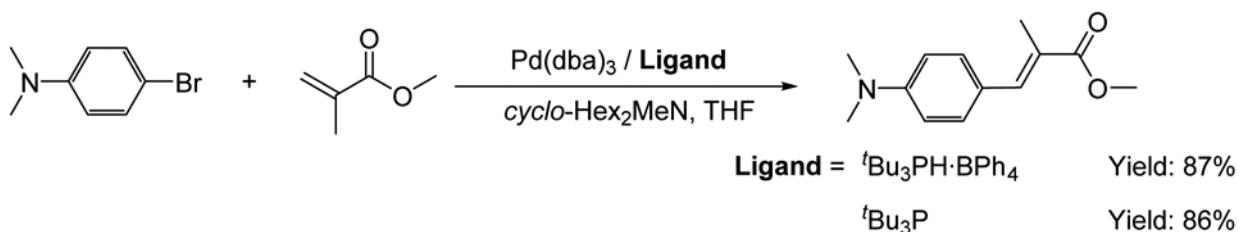
Suzuki Coupling ^{1,2)}



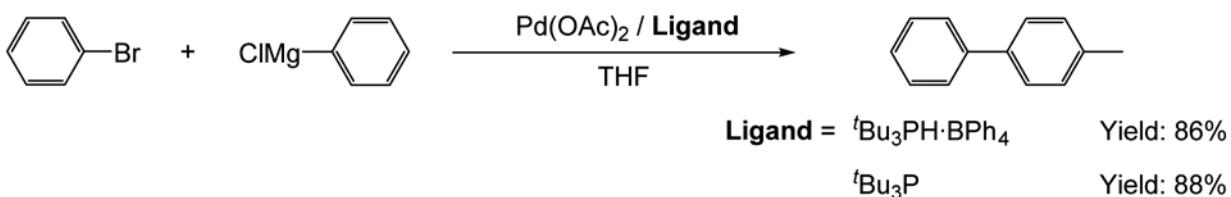
Sonogashira Coupling³⁾



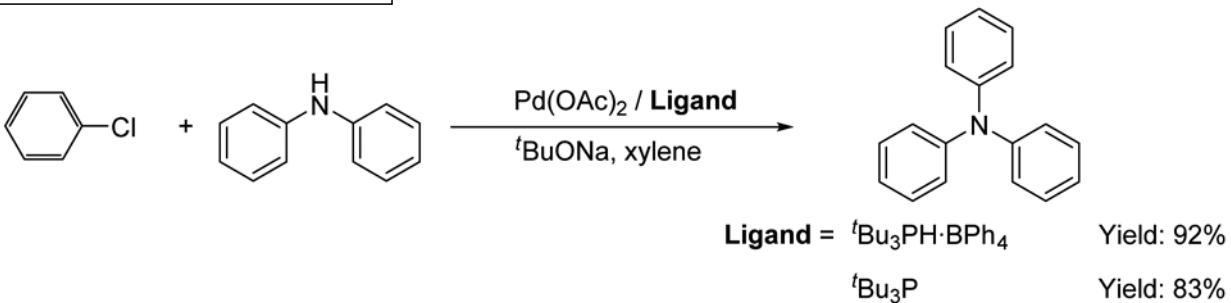
Heck Reaction⁴⁾



Cross Coupling⁵⁾



Buchwald-Hartwig Coupling⁶⁾

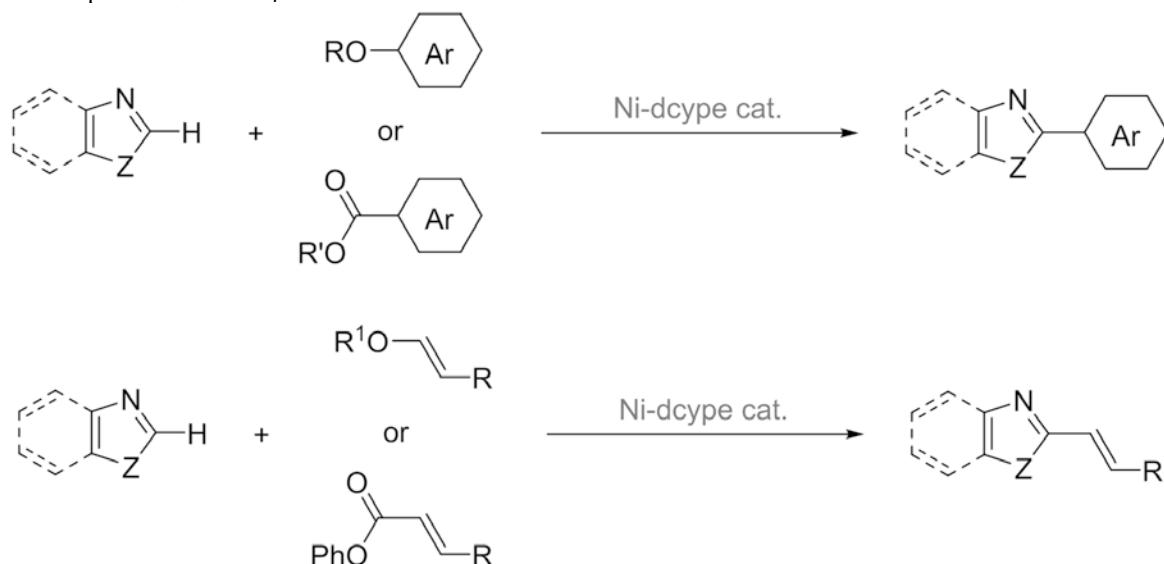


[Reference]

- 1) A. F. Littke, C. Dai, G. C. Fu, *J. Am. Chem. Soc.*, 2000, 122, 4020.
 - 2) J. H. Kirchhoff, M. R. Netherton, I. D. Hills, G. C. Fu, *J. Am. Chem. Soc.*, 2002, 124, 13662.
 - 3) T. Hundertmark, A. F. Little, S. L. Buchwald, G. C. Fu, *Org. Lett.*, 2000, 2, 1729.
 - 4) A. F. Littke, G. C. Fu, *J. Am. Chem. Soc.*, 2001, 123, 6989.
 - 5) T. Yamamoto, M. Nishiyama, Y. Koie, *Tetrahedron Lett.*, 1998, 39, 2367.
- ※ The yield of each reactions are experimental values which was tested according to the each methods described in the above references.

7. Ni-dcype [Nickel Catalyst for Direct Cross Coupling]

Our company launched a new Ni catalyst (Ni-dcype) developed by Prof. Kenichiro Itami, Prof. Junichiro Yamaguchi of Institute of Transformative Bio-Molecules (WPI-ItbM), Nagoya University. Cross coupling products are obtainable in high yields using this catalyst by the reaction of heteroaromatic compounds with phenol derivatives, aromatic compounds bearing ester functions, enol compounds, or α, β -unsaturated esters.



Product List

Product Name	Cat. No.	Packing
[1,2-Bis(dicyclohexylphosphino)ethane]dicarbonylnickel CAS : 141974-66-5 FW : 537.31	04870-65	500 mg
	04870-55	5 g

Related products

Product Name	Cat. No.	Packing
1,2-Bis(dicyclohexylphosphino)ethane CAS : 23743-26-2 FW : 422.60	04874-65	1 g
	04874-45	10 g
Bis(1,5-cyclooctadiene)nickel CAS : 1295-35-8 FW : 275.06	04875-65	1 g
	04875-55	5 g
Dicarbonylbis(triphenylphosphine)nickel CAS : 13007-90-4 FW : 639.28	11235-55	5 g

8. Potassium carbonate, Sodium carbonate

Potassium carbonate and Sodium carbonate are widely used in many fields and it plays a significant role like as a base or additive agent in organic synthesis field.

However, generally the solubility is low against organic solvents and it needs efficient dispersion using small particles depends on reaction systems.

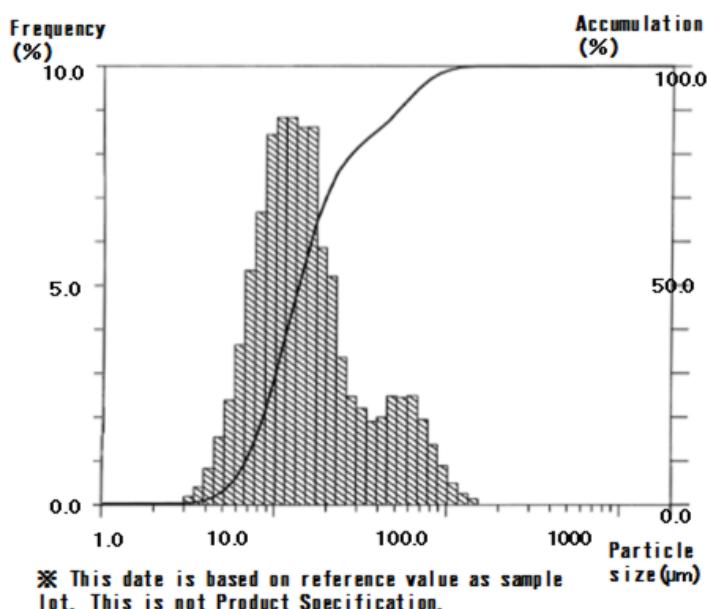
We Kanto Chemical launched product small particle Potassium carbonate and Sodium carbonate. Please consider our product which is good at handling and dispensability.

Features

- Guarantee Particle size
- Good Handling & Dispensability
- Low cost

● Example of Particle size distribution (Potassium carbonate)

Accumulation(%)	Particle size(μm)
5.0	5.65
10.0	6.84
20.0	8.59
30.0	10.14
40.0	11.83
50.0	13.81
60.0	16.17
70.0	19.71
80.0	27.65
90.0	51.50
95.0	67.90



Product List

Product Name	Cat. No.	Grade	Packing
Potassium carbonate (Fine powder) ※Particle size ($\leq 150\mu\text{m}$) : over 80%	32323-05	Organics	500 g
	32323-25		100 g
Sodium carbonate (Powder) ※Particle size ($\leq 150\mu\text{m}$) : over 70%	37141-05	Organics	500 g
	37141-25		100 g

9. R-Cat-Sil [Metal Scavengers]

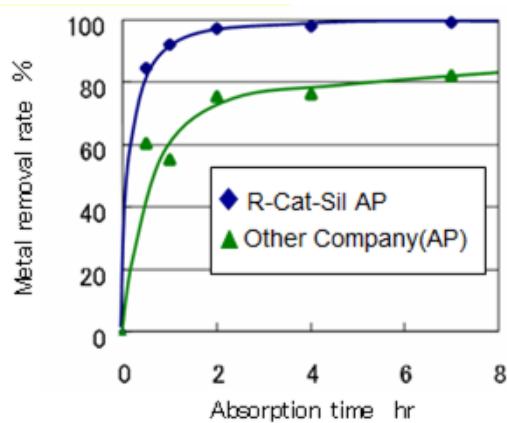
Molecular transformation reaction using Organometallic complex as catalyst is very useful reaction in the organic synthesis field.

However, there is some cases which its difficult to separate target compound and catalyst. We Kanto Chemical launched product which is easy to scavenge metal catalyst, "R-Cat-Sil(Metal Scavengers as silica gel with function)"

Features

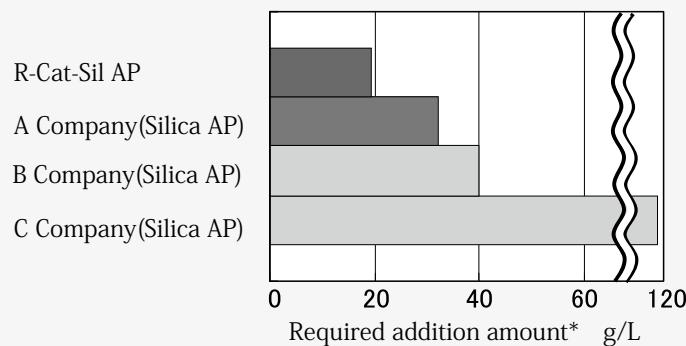
- Large surface area, High adsorption power
- Not swelling, Available for broad range of solvents
- Stable physically & thermally

Comparison of metal adsorbing speed



Scavenger addition amount : 15 g/L
Metal solution : 1000 ppm Pd (Pd(OAc)₂) in CH₂Cl₂

Comparison of required addition amount



* Addition amount for decreasing Pd concentration (calculate from Freundlich equation) to 0.1 ppm from 1000 ppm (Pd(OAc)₂ in CH₂Cl₂)

Product Name	Cat. No.	Packing
R-Cat-Sil AP Loading : 2.0 mmol/g <Metals removed> Pd, Ru, Rh, Co Cu, Fe, Ni	36044-55	5 g
	36044-35	25 g
	36044-25	100 g
R-Cat-Sil MP Loading : 1.2 mmol/g <Metals removed> Pd, Ru, Rh, Cu Pt, Pb, Ag, Hg	36045-55	5 g
	36045-35	25 g
	36045-25	100 g
R-Cat-Sil TA Loading : 1.0 mmol/g <Metals removed> Pd, Rh, Co, Cu Fe, Zn, Pt	36046-55	5 g
	36046-35	25 g
	36046-25	100 g

«Reference data» particle size : 50 μm, specific surface area : 730 m²/g

10. Related Products

Phosphine compounds

Product Name	CAS	Cat. No.	Packing
Allyldiphenylphosphine	2741-38-0	32086-1A	5 g
<i>rac</i> -BINAP	98327-87-8	05069-35	25 g
		05069-55	5 g
		05069-65	1 g
		04825-60	1 g
1,1'-Binaphthyl	604-53-5	40224-1A	5 g
		31682-1A	1 g
Bis(2-diphenylphosphinoethyl)phenylphosphine	23582-02-7	38002-1A	1 g
Bis(2-methoxyphenyl)phenylphosphine	36802-41-2	38002-2A	5 g
		31317-1A	100 mg
Borane-di(<i>tert</i> -butyl)phosphine complex	128363-76-8	38073-1A	1 g
Borane-dicyclohexylphosphine complex	108756-88-3	38072-1A	1 g
Borane-diphenylphosphine complex	41593-58-2	38075-1A	1 g
		38075-2A	5 g
Cyclohexyldiphenylphosphine	6372-42-5	07561-32	25 g
		07561-52	5 g
Di- <i>tert</i> -butylmethylphosphonium tetraphenylborate	853073-44-6	41129-45	10 g
2-(Di- <i>tert</i> -butylphosphino)-1,1'-binaphthyl	255836-67-0	38100-1A	1 g
2-(Di- <i>tert</i> -butylphosphino)biphenyl [JohnPhos]	224311-51-7	11059-55	5 g
		11059-65	1 g
2-Di- <i>tert</i> -butylphosphino-2'-methylbiphenyl [tBuMePhos]	255837-19-5	11062-65	1 g
		11062-68	100 mg
2-Di- <i>tert</i> -butylphosphino-2'-(<i>N,N</i> -dimethylamino)biphenyl [tBuDavePhos]	224311-49-3	11061-55	5 g
		11061-65	1 g
2-Di- <i>tert</i> -butylphosphino-3,4,5,6-tetramethyl-2',4',6'-triisopropylbiphenyl [Me4tBuXPhos]	857356-94-6	11063-65	1 g
		11063-68	100 mg
2-Di- <i>tert</i> -butylphosphino-2',4',6'-triisopropylbiphenyl [tBuXPhos]	564483-19-8	11055-55	5 g
		11055-65	1 g
Dicyclohexylphenylphosphine	6476-37-5	40708-1A	1 g
Dicyclohexylphosphine	829-84-5	11249-45	10 mL
2-Dicyclohexylphosphino-2',6'-diisopropoxybiphenyl [RuPhos]	787618-22-8	11057-55	5 g
		11057-65	1 g
2-Dicyclohexylphosphino-2',6'-dimethoxybiphenyl [SPhos]	657408-07-6	11049-55	5 g
		11049-65	1 g
2-Dicyclohexylphosphino-3,6-dimethoxy-2',4',6'-triisopropylbiphenyl [BrettPhos]	1070663-78-3	11058-65	1 g
		11058-68	100 mg
2-Dicyclohexylphosphino-2'-methylbiphenyl [MePhos]	251320-86-2	11054-55	5 g
		11054-65	1 g
2-Dicyclohexylphosphino-2'-(<i>N,N</i> -dimethylamino)biphenyl [DavePhos]	213697-53-1	11071-55	5 g
		11071-65	1 g
2-Dicyclohexylphosphino-2',4',6'-triisopropylbiphenyl [XPhos]	564483-18-7	11051-35	25 g
		11051-55	5 g
		11051-65	1 g
2-(Dicyclohexylphosphino)biphenyl [CyJohnPhos]	247940-06-3	11070-55	5 g
		11070-65	1 g
Diethylphenylphosphine	1605-53-4	10518-52	5 g
		10518-62	1 g
Dihydridotetrakis(triphenylphosphine)ruthenium(II)	19529-00-1	36749-1A	1 g
		36749-2A	5 g
		36749-3A	500 mg
2,5-Dihydroxyphenyl(diphenyl)phosphine oxide	13291-46-8	10692-32	25 g
		10692-52	5 g
2,2'-Dimethoxy-1,1'-binaphthyl	2960-93-2	34236-1A	5 g
		34236-2A	25 g

Product Name	CAS	Cat. No.	Packing
[4-(<i>N,N</i> -Dimethylamino)phenyl]di- <i>tert</i> -butylphosphine [Amphos]	932710-63-9	11335-55	5 g
		11335-65	1 g
Dimethyl(phenyl)phosphine	672-66-2	11292-55	5 mL
Diphenyl(pentafluorophenyl)phosphine	5525-95-1	30575-1A	500 mg
Diphenylphosphine	829-85-6	10694-32	25 g
		10694-52	5 g
Diphenylphosphine oxide	4559-70-0	31012-1A	1 g
2-Diphenylphosphino-2'-(<i>N,N</i> -dimethylamino)biphenyl [PhDavePhos]	240417-00-9	11075-55	5 g
		11075-65	1 g
Diphenyl-2-pyridylphosphine	37943-90-1	10440-52	5 g
		10440-62	1 g
Diphenylvinyl phosphine	2155-96-6	10525-32	25 g
		10525-52	5 g
2-(Diphenylphosphino)benzoic acid	17261-28-8	38293-1A	1 g
		38293-2A	5 g
Diphenyl(<i>p</i> -tolyl)phosphine	1031-93-2	31533-1A	10 g
(Ethylcyclopentadienyl)(triphenylphosphine) copper(I)	308847-89-4	34794-1A	1 g
Ethyldiphenylphosphine	607-01-2	38301-1A	1 g
		38301-2A	5 g
Ethylenebis(triphenylphosphine)platinum(0)	12120-15-9	36936-1A	250 mg
		36936-2A	1 g
Hydridotetrakis(triphenylphosphine)rhodium(I)	18284-36-1	37793-1A	250 mg
		37793-2A	1 g
[[2-(Isopropoxy)-5-(<i>N,N</i> -dimethylaminosulfonyl)phenyl]methylene] (tricyclohexylphosphine)ruthenium(II) dichloride	918871-44-0	20348-55	5 g
		20348-65	1 g
Methyldiphenylphosphine	1486-28-8	25842-55	5 mL
		40897-1A	25 g
		40897-2A	5 g
Sodium 2'-dicyclohexylphosphino-2,6-dimethoxybiphenyl-3-sulfonate hydrate [Sphos-SO ₃ Na]	1049726-96-6	38010-65	1 g
		38010-68	100 mg
Tetrakis(triphenylphosphine)platinum(0)	14221-02-4	22396-1A	1 g
Tri- <i>n</i> -butylphosphine	998-40-3	40889-05	500 mL
		40889-25	100 mL
		40889-35	25 mL
Tri- <i>n</i> -butylphosphine oxide	814-29-9	40892-35	25 g
Tributylphosphine oxide	-	17416-1A	5 g
		17416-2A	10 g
		17416-3A	50 g
Tri- <i>tert</i> -butylphosphine	13716-12-6	40891-55	5 g
		40891-95	50 g
Tri- <i>tert</i> -butylphosphine tetrafluoroborate	131274-22-1	36694-1A	1 g
		36694-2A	5 g
Tri- <i>tert</i> -butylphosphonium tetraphenylborate	131322-08-2	41128-45	10 g
Tricyclohexylphosphine	2622-14-2	42161-1A	5 g
		42161-2A	1 g
Tricyclohexylphosphine, in toluene	-	40908-35	25 mL
Tricyclohexylphosphine oxide	13689-19-5	40376-52	5 g
		40376-62	1 g
Triethylphosphine, Toluene solution	554-70-1	40621-25	100 mL
		40621-35	25 mL
Tri(2-furyl)phosphine	5518-52-5	41191-52	5 g
		41191-62	1 g
		29480-1A	250 mg
Triisopropylphosphine	6476-36-4	40928-55	5 mL
Trimesitylphosphine	23897-15-6	32113-1A	1 g
Trimethylphosphine	594-09-2	40939-55	5 mL
Tri- <i>n</i> -octylphosphine	4731-53-7	40946-35	25 mL
Tri- <i>n</i> -octylphosphine oxide	78-50-2	40947-25	100 g
		20760-1A	25 g
Tri- <i>n</i> -propylphosphine	2234-97-1	40955-45	10 mL

Product Name	CAS	Cat No.	Packing
Triphenylborane-triphenylphosphine complex	3053-68-7	40319-35	25 g
		40319-55	5 g
Triphenylphosphine	603-35-0	40950-05	500 g
		40950-25	100 g
		40950-35	25 g
		40950-85	10 kg
		40315-32	25 g
Triphenylphosphine hydrobromide	6399-81-1	40315-52	5 g
		26909-1A	25 g
		26909-2A	5 g
		26909-3A	100 g
		40951-05	500 g
Triphenylphosphine oxide	791-28-6	40951-25	100 g
		40951-35	25 g
		40951-85	5 kg
		17726-1A	5 g
Triphenylphosphine selenide	3878-44-2	17726-2A	25 g
		40906-32	25 g
Tris(2-carboxyethyl)phosphine hydrochloride	51805-45-9	40906-52	5 g
		36383-1A	1 g
		36383-2A	10 g
		36496-1A	5 g
Tris(2,6-dimethoxyphenyl)phosphine	85417-41-0	36496-2A	25 g
Tris(2,5-dimethylphenyl)phosphine	115034-38-3	37628-1A	500 mg
Tris(3,5-dimethylphenyl)phosphine	69227-47-0	37627-1A	500 mg
Tris[2-(diphenylphosphino)ethyl]phosphine	23582-03-8	31683-1A	1 g
Tris(4-fluorophenyl)phosphine	18437-78-0	30634-1A	1 g
Tris(hydroxymethyl)phosphine	2767-80-8	36384-1A	1 g
Tris(2-methoxyphenyl)phosphine	4731-65-1	37885-1A	1 g
		37885-2A	5 g
Tris(4-methoxyphenyl)phosphine	855-38-9	42224-1A	10 g
		42224-2A	1 g
Tris(pentafluorophenyl)phosphine	1259-35-4	31316-1A	1 g
		31316-2A	5 g
Tris(2-thienyl)phosphine	24171-89-9	35180-1A	1 g
		35180-2A	5 g
Tris(4-trifluoromethylphenyl)phosphine	13406-29-6	35534-1A	1 g
Tri- <i>m</i> -tolylphosphine	6224-63-1	40959-45	10 g
Tri- <i>o</i> -tolylphosphine	6163-58-2	40958-45	10 g
Tri- <i>p</i> -tolylphosphine	1038-95-5	40960-45	10 g

Chiral Phosphine ligands

Product Name	CAS	Cat. No.	Packing
<i>(R)</i> -(+)-BINAP	76189-55-4	04969-35	25 g
		04969-55	5 g
		04969-65	1 g
<i>(S)</i> -(-)-BINAP	76189-56-5	04970-35	25 g
		04970-55	5 g
		04970-65	1 g
(<i>-</i>)-1,2-Bis[(2 <i>R</i> ,3 <i>R</i>)-2,5-Diethylphospholano]benzene	136705-64-1	36372-1A	100 mg
(<i>+</i>)-1,2-Bis[(2 <i>R</i> ,3 <i>R</i>)-2,5-Dimethylphospholano]ethane	129648-07-3	36373-1A	100 mg
(<i>-</i>)-1,2-Bis[(2 <i>S</i> ,3 <i>S</i>)-2,5-Dimethylphospholano]ethane	136779-26-5	36374-1A	100 mg
(2 <i>R</i> ,3 <i>R</i>)-(<i>-</i>)-2,3-Bis(diphenylphosphino)bicyclo[2.2.1]hept-5-ene	71042-54-1	36376-1A	100 mg
<i>(R)</i> - <i>(S)</i> -BPPFOH	—	04966-95	250 mg
<i>(S)</i> - <i>(R)</i> -BPPFOH	—	04967-95	250 mg
<i>(R)</i> - <i>(S)</i> -BPPFOAc	—	04964-95	500 mg
<i>(S)</i> - <i>(R)</i> -BPPFOAc	—	04965-95	500 mg
(2 <i>S</i> ,4 <i>S</i>)-(<i>-</i>)-2,4-Bis(diphenylphosphino)pentane	77876-39-2	36377-1A	500 mg

Product Name	CAS	Cat. No.	Packing
(R)-(+)-Bis-(1,2-diphenylphosphino)propane	67884-32-6	25490-1A	1 g
		25490-2A	250 mg
(R)-(+)-Tol-BINAP	99646-28-3	41105-55	5 g
		41105-65	1 g
(S)-(-)-Tol-BINAP	100165-88-6	41106-55	5 g
		41106-65	1 g
(R)-(+)-[(5,6),(5',6')-Bis(ethylenedioxy)biphenyl-2,2'-diyl](diphenylphosphine)	445467-61-8	37514-1A	100 mg
		37514-2A	250 mg
(S)-(-)-[(5,6),(5',6')-Bis(ethylenedioxy)biphenyl-2,2'-diyl](diphenylphosphine)	503538-68-9	37515-1A	100 mg
		37515-2A	250 mg
(1 <i>R</i> ,2 <i>R</i>)-Bis[(2-methoxyphenyl)phenylphosphino]ethane	55739-58-7	37935-1A	1 g
(R)-(S)-BPPFA	74311-56-1	04962-95	500 mg
(S)-(R)-BPPFA	55650-59-4	04963-95	500 mg
(R,R)-Chiraphos	74839-84-2	29242-2A	100 mg
(S,S)-Chiraphos	64896-28-2	29243-1A	250 mg
(R)-(+)-2,2'-Diamino-1,1'-binaphthalene	18741-85-0	35651-1A	1 g
(S)-(-)-2,2'-Diamino-1,1'-binaphthalene	18531-95-8	35652-1A	1 g
(R)-(-)-1-[(S)-2-(Di- <i>tert</i> -butylphosphino)ferrocenyl]ethyl-di-(4-trifluoromethyl-phenyl)phosphine	246231-79-8	37075-1A	100 mg
		37075-2A	500 mg
(R)-(-)-1-[(S)-2-(Dicyclohexylphosphino)ferrocenyl]ethylidicyclohexylphosphine	167416-28-6	37069-1A	100 mg
		37069-2A	500 mg
(4 <i>R</i>)-(+)-4,5-Dihydro-2-[2'-(diphenylphosphino)phenyl]-4-isopropylloxazole	164858-78-0	35374-1A	100 mg
(4 <i>S</i>)-(-)-4,5-Dihydro-2-[2'-(diphenylphosphino)phenyl]-4-isopropylloxazole	148461-14-7	35373-1A	100 mg
(S)-(R)-PPFA	55650-58-3	32919-95	500 mg
PPM	61478-29-3	32885-68	100 mg
(R)-(-)-1-[(S)-2-(Diphenylphosphino)ferrocenyl]ethylbis(3,5-dimethylphenyl)phosphine	184095-69-0	37070-1A	100 mg
		37070-2A	500 mg
(R)-(-)-1-[(S)-2-(Diphenylphosphino)ferrocenyl]ethylid- <i>tert</i> -butylphosphine	155830-69-6	37068-1A	100 mg
		37068-2A	500 mg
(R)-(-)-1-[(S)-2-(Diphenylphosphino)ferrocenyl]ethylidicyclohexylphosphine	155806-35-2	37067-1A	100 mg
		37067-2A	500 mg
(R)-(+)-1-(2-Diphenylphosphino-1-naphthyl)isoquinoline	149341-34-4	36381-1A	100 mg
(S)-(-)-1-(2-Diphenylphosphino-1-naphthyl)isoquinoline	149341-33-3	36380-1A	100 mg
(R)-(-)-1-[(R)-2-(2'-Diphenylphosphinophenyl)ferrocenyl]ethylid(bis-3,5-CF ₃ -Ph ₂)P	387868-06-6	37076-1A	100 mg
		37076-2A	500 mg
(R,R)-(-)-1,2-Ethanediylbis[(2-methoxyphenyl)phenylphosphine]rhodium(I) tetrafluoroborate	56977-92-5	36348-1A	100 mg
(+)-2,3-O-Isopropylidene-2,3-dihydroxy-1,4-bis(diphenylphosphino)butane	37002-48-5	21801-1A	250 mg
		21801-2A	1 g
(-)-2,3-O-Isopropylidene-2,3-dihydroxy-1,4-bis(diphenylphosphino)butane	32305-98-9	21800-1A	250 mg
		21800-2A	1 g
(S)-(+)-Neomenthyldiphenylphosphine	43077-29-8	36382-1A	500 mg
(R)-(+)-Tol-BINAP	99646-28-3	41105-55	5 g
		41105-65	1 g
(S)-(-)-Tol-BINAP	100165-88-6	41106-55	5 g
		41106-65	1 g
(R)-(+)-Xyl-BINAP	137219-86-4	46101-65	1 g
		46101-55	5 g
(S)-(-)-Xyl-BINAP	135139-00-3	46102-65	1 g

Polydentate

Product Name	CAS	Cat. No.	Packing
1,2-Bis(dichlorophosphino)ethane	28240-69-9	32147-1A	1 g
1,2-Bis(dicyclohexylphosphino)ethane	23743-26-2	04874-65	1 g
		04874-45	10 g
[1,2-Bis(dicyclohexylphosphino)ethane]dicarbonylnickel(0)	141974-66-5	04870-65	500 mg
		04870-55	5 g
1,3-Bis(dicyclohexylphosphino)propane	103099-52-1	38112-1A	250 mg
		38112-2A	1 g

Product Name	CAS	Cat. No.	Packing
1,1'-Bis(diisopropylphosphino)ferrocene	97239-80-0	36387-1A	500 mg
1,2-Bis(dipentafluorophenylphosphino)ethane	76858-94-1	36370-1A	1 g
Bis(diphenylphosphino)acetylene	5112-95-8	34779-1A 34779-2A	1 g 5 g
1,2-Bis(diphenylphosphino)benzene	13991-08-7	36375-1A	1 g
1,4-Bis(diphenylphosphino)butane	7688-25-7	04876-45	10 g
4,5-Bis(diphenylphosphino)-9,9-dimethylxanthene	161265-03-8	04883-52 04883-62	5 g 1 g
1,2-Bis(diphenylphosphino)ethane	1663-45-2	04877-45	10 g
1,2-Bis(diphenylphosphino)ethane nickel(II) chloride	14647-23-5	36323-1A 36323-2A	1 g 5 g
cis-1,2-Bis(diphenylphosphino)ethylene	983-80-2	32089-1A	1 g
trans-1,2-Bis(diphenylphosphino)ethylene	983-81-3	31004-1A	1 g
Bis(2-diphenylphosphinoethyl)phenylphosphine	23582-02-7	31682-1A	1 g
1,1'-Bis(diphenylphosphino)ferrocene	12150-46-8	04223-32 04223-52	25 g 5 g
1,1'-Bis(diphenylphosphino)ferrocene	12150-46-8	34801-1A	5 g
Bis(diphenylphosphino)methane	2071-20-7	04878-45	10 g
1,5-Bis(diphenylphosphino)pentane	27721-02-4	32085-1A	1 g
		05098-35	25 g
Bis[2-(diphenylphosphino)phenyl]ether	166330-10-5	05098-55 38337-1A 38337-2A	5 g 5 g 25 g
1,3-Bis(diphenylphosphino)propane	6737-42-4	04879-45	10 g
[1,3-Bis(diphenylphosphino)propane]nickel(II) chloride	15629-92-2	29159-1A 29159-2A	5 g 1 g
2-(Di- <i>tert</i> -butylphosphino)-1,1'-binaphthyl	255836-67-0	38100-1A	1 g
2-(Di- <i>tert</i> -butylphosphino)biphenyl	224311-51-7	35621-1A	500 mg
2-Di- <i>tert</i> -butylphosphino-2'-(N,N-dimethylamino)biphenyl	224311-49-3	38006-1A	1 g
2-Di- <i>tert</i> -butylphosphino-2'-methylbiphenyl	255837-19-5	11062-65 11062-68	1 g 100 mg
2-Di- <i>tert</i> -butylphosphino-2'-methylbiphenyl	255837-19-5	38007-1A	1 g
2-Di- <i>tert</i> -butylphosphino-2',4',6'-triisopropylbiphenyl	564483-19-8	11055-55 11055-65	5 g 1 g
		10125-32	25 g
2-(Dicyclohexylphosphino)biphenyl	247940-06-3	10125-52 35622-1A 35622-2A	5 g 500 mg 2 g
2-Dicyclohexylphosphino-2',6'-diisopropoxybiphenyl	787618-22-8	11057-55 11057-65	5 g 1 g
2-Dicyclohexylphosphino-2',6'-dimethoxybiphenyl	657408-07-6	11049-55 11049-65	5 g 1 g
2-Dicyclohexylphosphino-3,6-dimethoxy-2',4',6'-triisopropylbiphenyl	1070663-78-3	11058-65 11058-68	1 g 100 mg
		11071-55	5 g
2-Dicyclohexylphosphino-2'-(N,N-dimethylamino)biphenyl	213697-53-1	11071-65 35623-1A	1 g 500 mg
		11054-55	5 g
2-Dicyclohexylphosphino-2'-methylbiphenyl	251320-86-2	11054-65 38008-1A	1 g 1 g
		11051-55	5 g
2-(Dicyclohexylphosphino)-2',4',6'-tri-isopropyl-1,1'-biphenyl	564483-18-7	11051-65	1 g
2-(Diphenylphosphino)benzoic acid	17261-28-8	38293-1A 38293-2A	1 g 5 g
2-Diphenylphosphino-2'-(N,N-dimethylamino)biphenyl	240417-00-9	38009-1A	1 g
Tris[2-(diphenylphosphino)ethyl]phosphine	23582-03-8	31683-1A	1 g
Tetraphenyldiphosphine	1101-41-3	32153-1A	1 g

Phosphorus precursors

Product Name	CAS	Cat. No.	Packing
Bis(diethylamino)chlorophosphine	685-83-6	31736-1A	1 g
Bis(diisopropylamino)chlorophosphine	56183-63-2	32156-1A	5 g
<i>tert</i> -Butyldichlorophosphine	25979-07-1	30053-1A	2.5 g
Chlorodicyclohexylphosphine	16523-54-9	35329-1A 35329-2A	1 g 5 g
Chloro(diethyl)phosphine	686-69-1	35031-1A	1 g
Chlorodiisopropylphosphine	40244-90-4	32155-1A	5 g
Chlorodiphenylphosphine	1079-66-9	08017-05 08017-35	500 mL 25 mL
Di- <i>tert</i> -butylchlorophosphine	13716-10-4	32090-1A	5 mL
Di- <i>tert</i> -butylphosphine, in hexanes	819-19-2	38302-1A 38302-2A	10 mL 50 mL
Dichloro(phenyl)phosphine	644-97-3	11248-35	25 mL
Diisopropylphosphine, in hexanes	20491-53-6	38340-1A 38340-2A	10 g 50 g

Palladium Catalysts

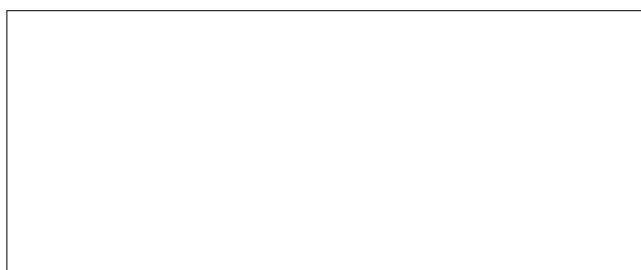
Product Name	CAS	Cat. No.	Packing
Allylpalladium chloride,dimer	12012-95-2	20683-1A	500 mg
Ammonium palladium(II) chloride	13820-40-1	32002-62	1 g
Bis(acetonitrile)dichloropalladium(II)	14592-56-4	04871-65	1 g
Bis(benzonitrile)dichloropalladium(II)	14220-64-5	04872-65	1 g
		05123-65	1 g
Bis[1,2-bis(diphenylphosphino)ethane]palladium(0)	31277-98-2	21299-1A 21299-2A	1 g 5 g
Bis(dibenzylideneacetone)palladium	32005-36-0	29197-1A 29197-2A	5 g 1 g
[1,2-Bis(diphenylphosphino)ethane]dichloropalladium(II)	19978-61-1	38403-1A 38403-2A	1 g 5 g
		04224-32 04224-52 34868-1A 34868-2A 34868-3A	25 g 5 g 1 g 5 g 25 g
1,1'-Bis(diphenylphosphino)ferrocene-palladium(II) dichloride dichloromethane adduct	95464-05-4	12081-18-4	05124-65
Bis(2-methylallyl)palladium chloride dimer		53199-31-8	1 g
Bis(<i>tri</i> - <i>tert</i> -butylphosphine)palladium(0)		33309-88-5	100 mg
Bis(tricyclohexylphosphine)palladium(0)		14588-08-0	100 mg
Bis(triphenylphosphine)palladium(II) acetate		185812-86-6	20927-1A 20927-2A
Di- μ -bromobis(<i>tri</i> - <i>tert</i> -butylphosphino)dipalladium(I)		19978-61-1	5 g 1 g
Dichloro[1,2-bis(diphenylphosphino)ethane]palladium(II)		29934-17-6	11862-65
Dichlorobis(tricyclohexylphosphine)palladium(II)		13965-03-2	11863-65
Dichlorobis(triphenylphosphine)palladium(II)		40691-33-6	11864-65
Dichlorobis(<i>tri</i> - <i>o</i> -tolylphosphine)palladium(II)		3375-31-3	32789-65 19518-1A 19518-2A 19518-3A
Palladium(II) acetate		14024-61-4	1 g
Palladium(II) acetylacetone		13444-94-5	19519-1A 19519-2A
Palladium(II) bromide		12135-22-7	32087-32 32087-52
Palladium hydroxide on carbon		12135-22-7	19962-1A 19962-2A
Palladium hydroxide on carbon powder		10102-05-3	5 g 10 g 50 g
Palladium(II) nitrate			1 g

Product Name	CAS	Cat. No.	Packing
Palladium on activated carbon, 10% Pd	7440-05-3	19503-1A	10 g
		19503-2A	1 g
		19503-3A	50 g
Palladium on activated carbon, unreduced, 5% Pd	7440-05-3	19502-1A	10 g
		19502-2A	100 g
Palladium on activated carbon, 3% Pd	7440-05-3	21787-1A	10 g
Palladium on 1/8-inch alumina pellets	7440-05-3	19508-1A	50 g
		19508-2A	250 g
		29303-1A	10 g
Palladium on alumina powder	7440-05-3	29303-2A	50 g
		19506-1A	10 g
Palladium on barium carbonate	7440-05-3	31757-1A	10 g
Palladium on barium sulfate, 5% Pd	7440-05-3	19506-2A	50 g
		19507-1A	10 g
Palladium on barium sulfate, reduced, 5% Pd	7440-05-3	31753-1A	10 g
Palladium on calcium carbonate, poisoned with 3.5% lead, 5% Pd	7440-05-3	19507-2A	50 g
		42298-1A	10 g
		42298-2A	1 g
Palladium on carbon	7440-05-3	42298-3A	25 g
		13820-53-6	32013-62
		42196-31-6	31702-1A
Tetrakis(acetonitrile)palladium(II) tetrafluoroborate	21797-13-7	36352-1A	1 g
Tetrakis(triphenylphosphine)palladium(0)	14221-01-3	40864-35	25 g
		40864-55	5 g
		40864-65	1 g
Tris(dibenzylideneacetone)(chloroform)-di-palladium(0)	52522-40-4	40956-65	1 g
Tris(dibenzylideneacetone)dipalladium(0)	51364-51-3	31877-1A	500 mg
		31877-2A	5 g

Nickel Catalysts

Product Name	CAS	Cat. No.	Packing
Bis(1,5-cyclooctadiene)nickel(0)	1295-35-8	04875-55	5 g
		04875-65	1 g
[1,2-Bis(dicyclohexylphosphino)ethane]dicarbonylnickel(0) [Ni-dcype]	141974-66-5	04870-65	500 mg
		04870-55	5 g
Bis(4-dimethylaminodithiobenzil)nickel	38465-55-3	40068-62	250 mg
1,2-Bis(diphenylphosphino)ethane nickel(II) chloride	14647-23-5	36323-1A	1 g
		36323-2A	5 g
[1,3-Bis(diphenylphosphino)propane]nickel(II) chloride	15629-92-2	29159-1A	5 g
		29159-2A	1 g
Bis(triphenylphosphine)nickel(II) chloride	14264-16-5	21750-1A	10 g
		21750-2A	50 g
Dicarbonylbis(triphenylphosphine)nickel(0)	13007-90-4	11235-55	5 g
Dicyclopentadienylnickel(II)	1271-28-9	11251-55	5 g
Nickel(II) acetate tetrahydrate	6018-89-9	28105-00	500 g
		28105-20	100 g
		28105-30	25 g
		28105-01	500 g
Nickel(II) acetylacetone dihydrate	14363-16-7	28579-35	25 g
Nickel(II) benzoate	553-71-9	28111-02	500 g
Nickel(II) bis(dibutylthiocarbamate)	13927-77-0	28013-02	500 g
		28013-32	25 g
Nickel(II) bromide trihydrate	13462-88-9	28113-01	500 g
Nickel cyclohexanebutyrate	3906-55-6	41557-1A	5 g
		41557-2A	1 g
Nickel(II) tetrafluoroborate hexahydrate	15684-36-3	35873-1A	10 g
		35873-2A	25 g
Tetrakis(triphenylphosphine)nickel(0)	15133-82-1	22398-1A	1 g
		22398-2A	5 g
Trifluoromethanesulfonic acid nickel salt	—	40848-32	25 g

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